



CCI

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CHAPTER

Golden Rules of English Grammar

NOUN

Rule:1

- Sometimes, “*The*” is used before a proper noun to use it like a common noun.

Example

- ✓ Kalidas is the Shakespeare of India.

- Sometimes, a proper noun is also used like a common noun. At that time, the proper noun represents a class or a person of that class.

Example

- ✓ There are five Ram in my Class.

- Proper, material, and abstract nouns are always singular, but when they are used in a plural sense, they become common nouns.

Example

- ✓ Simran is the wife of Shivam. (Proper Noun)

Rule 2: Generally, a collective noun takes a singular verb. A plural verb is used only when each member of the group is referred to.

Example

- The crowd of the migrant workers at the station for the Shramik Special is unforgettable.
- A pride of lions consists of related females, cubs, and a small number of adult males.

Rule 3: Some nouns are always used in plural form. The ‘s’ at the end cannot be removed to make them singular. They look plural and are used as plural.

- **Words :** Alms, amends, annals, archives, ashes, arrears, athletics, auspices, caves, species, scissors, trousers, pants, clippers, bellows, gallows, fangs, eyeglasses, goggles, belongings, breeches, bowels, braces, binoculars, customs, congratulations, dregs, earnings, entrails, embers, fetters, fireworks, lodgings, lees, odds, outskirts, particulars, proceeds, proceedings, regards, riches, remains, savings, shambles, shears, spectacles, surroundings, tidings, troops, tactics, thanks, tongs, vegetables, valuables, wages, Bacteria etc.

Example

- ✓ My father gave me a pair of binoculars on my birthday.
- ✓ Bacteria are single-celled organisms that can reproduce on their own.

Rule 4: Some nouns appear plural but are singular in meaning. They are always used as singular.

- **Words:** News, Innings, Politics, Summons, Physics, Economics, Ethics, Mechanics, Mathematics, Mumps, Rickets, Billiards, Draughts, etc.

Example

- ✓ The first innings of the match was very sensational.

Rule 5: Some nouns appear singular but are always used as plural.

- **Words:** cattle clergy, cavalry, infantry, poultry, peasantry, children, gentry, police etc.

Example

- ✓ Cattle have died when liquid manure stored in pits under slotted floors was agitated.

Rule 6: Some nouns are used only in singular form. These are uncountable nouns, and articles *a/an* are not used with them.

- **Words:** Scenery, Poetry, Furniture, Advice, Information, Hair, Language, Business, Mischief, Bread, Stationery, Crockery, Luggage, Baggage, Postage, Knowledge, Wastage, Money, Jewellery, Breakage, temper.

Example

- ✓ We need to buy new furniture for the office.
- ✓ The scenery was so beautiful that John was mesmerized and captivated by all that he saw.
- ✓ Dozens of lower courts have rejected cases pressed by Trump and his allies.

Rule 7: Some nouns have the same form in both singular and plural.

- **Words:** deer, fish, crew, family, team, jury, carp, pike, trout, aircraft, counsel, committee etc.

Example

- ✓ The committee were split on whether the new regulations for the National Health Protection Scheme should be implemented.

Rule 8: Some nouns are plural in meaning, but when they are used with a definite numeral adjective, they are not pluralized.

- **Words:** Pair, score, gross, stone, hundred, dozen, thousand, million, Billion etc.

Example

- ✓ Amount of less than a million rupees is required right now. Take the money to the bank and withdraw it.
- ✓ His sons-in-law have enhanced his business within a short period.

Rule 9: If a noun is followed by a preposition and then the same noun is repeated, the noun remains singular.

Example:

- a. Town after town was devastated.
- b. Row upon row of pick marble looks beautiful.
- c. He enquired from door to door.
- d. Ship after ship is arriving.

Note: In such sentences, writing towns after towns, rows upon rows, doors to doors, or ships after ships is incorrect.

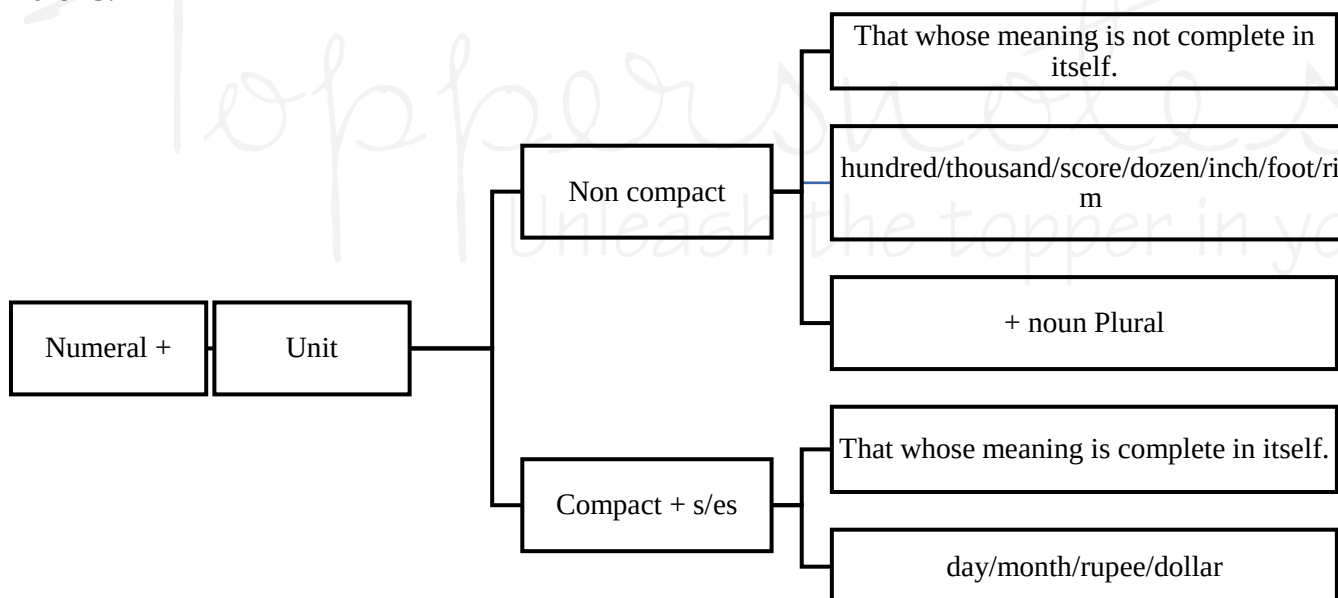
Rule 10: In a sentence, when a half or a quarter comes after a numeral adjective, the noun is placed after the numeral adjective, followed by a half or a quarter.

Example:

- a. He gave me one rupee and a half.
- b. She gave me two rupees and a quarter.

Notes: If the numeral adjective and fraction are joined with *and* and used in the sense of multiplication, then the noun is used in plural form after *a half* or *a quarter*.

Rule 15:

**Example:**

- a. Ramesh spent ten rupees.
- b. She sold two dozens.
- c. We bought two dozen mangoes from the market.

Rule 16: Unit (Plural) of noun (Plural) + plural helping verb

Example:

- a. Hundreds of shops are closed during riot.

Example:

- a. Two and a quarter times.
- b. One and a half times.

Here, multiplication is implied; therefore, the noun "times" is used in plural after a quarter / a half.

Rule 11: A hyphenated noun is not used in plural form.

Example:

- a. He gave me two hundred-rupee notes.
- b. He stays in five-star hotels. (change stars to star)

Rule 12: With a set of / a pair of / a group of / each of / either of / neither of, the noun is plural, but the helping verb is singular.

Example:

- a. A set of proceeds was deposited in bank account.
- b. A pair of shocks has bought by Ramesh.
- c. Each of Students has solved this Questions.

Rule 13: both of / all of + Noun plural + helping Plural

Example:

- a. All of students are thrown out in my class.

Rule 14: Numeral + unit (singular) + Noun (singular)/ adjective

Numeral + unit (Plural) + adjective

Example:

- a. She saw a six foot snake.
- b. He is six feet tall

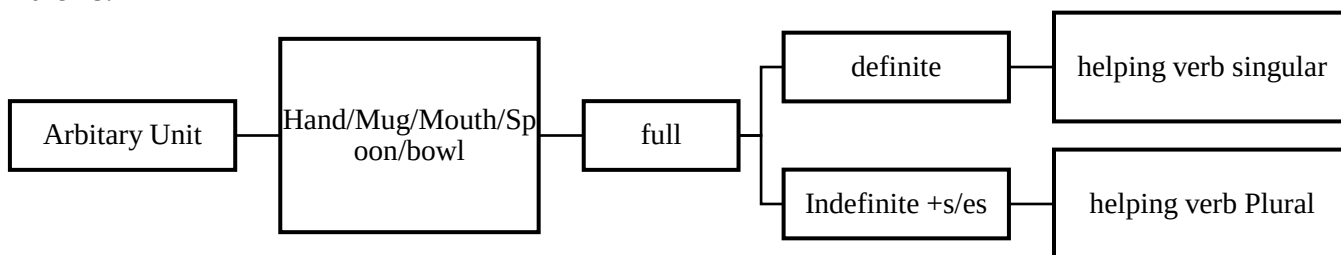
- b. Balloons filled with helium travel hundreds or even thousands of miles.

Rule 17: more than one unit in sentence. We use unit in ascending order.

Example:

- a. Thousands of lakhs of student of student have given test.

Rule 18:



Example:

- Two Spoonful
- His sons-in-law have enhanced his business within a short period

Rule 19:

Example:

- Ten miles needs to covered completely on foot.
- Five thousands rupees were spent on foot and entertainment.

PRONOUN

Rule 1: In a sentence, the pronoun used before the verb is in the nominative (subjective) case, and the pronoun used after the verb is in the objective case.

Structure:

- Subjective / Nominative + Verb + Objective → I teach him → Active Voice
- Subjective/ Nominative + Verb + Objective → He is taught by me. → Passive Voice

Example:

- The credit for organizing the successful event was given to both Neha and me.
- She came home to meet my family and me.

Rule 2: Singular Pronoun: If more than one pronoun is used in a sentence and the sentence does not express anything negative, then the order 231 (2nd person, 3rd person, 1st person) is used.

Example

- ✓ Sia and I spent a few magical minutes observing giraffes and elephants assembling at a watering hole.
- ✓ Mary and I will be going to the movies after we're done with the marathon.

Rule 3: Plural Pronoun: When more than one pronoun is used in a sentence and they are plural, the order 123 (1st person, 2nd person, 3rd person) is used.

Example

- You, she and I will be traveling by my car.

Rule 4: If the sentence expresses a mistake, fault, crime, or a negative idea, then the order of pronouns should be 123.

Example

- I and he will beg sorry for the misconduct.

Rule 5: If different persons' pronouns are used in a sentence and a single plural pronoun is used for them, then:

- III + I Person → I Person Plural
- II + III Person → II Person Plural
- II + I Person → I Person Plural

Example:

- You** and **I** have done our job.
- You he** and **I** have completed our duty.
- You and I have submitted our work on time.

Rule 6: With a collective noun, the pronoun is singular (and neuter gender) when the noun is used as a single unit. If the collective noun is used in a divided sense, a plural pronoun is used.

Example

- Apart from Germany, they also visited Italy and Austria during **their** business trip.

Rule 7: When two or more pronouns are joined by and, the pronoun is plural.

Example:

- Ram** and **Mohan** went to their school.
- Suresh** and **his family** members have completed their work.

Rule 8: When two singular nouns are joined by and and each is preceded by each or every, the pronoun is singular.

Example:

- Each** officer and **each** clerk has joined his duty.
- Every** soldier and **every** officer was in his place.

Rule 9: With each, either, and neither, always use a singular pronoun and a singular verb.

Example

- Each of the employees needs to submit his or her reports by Friday.

Rule 10: When two or more singular nouns are joined by *or*, *either...or*, *neither...nor*, a singular pronoun is used.

Example:

- Neither the tunny nor the coral fishery is carried on by the Sardinians themselves, who are not sailors by nature.
- Either my brother or my parents are going to bring the sleeping bags.
- Neither Suresh nor Ramesh is allowed to enter the class if they have not completed the homework given by me last week.

Rule 11: When one plural and one singular noun are joined by *or* or *nor*, a plural pronoun is used.

Example:

- a. **Either** the Principal **or** the teachers failed in their duty.
- b. **Neither** the teacher **nor** the students have done their work.

Rule 12: In comparative sentences, after *than* or *as*, whether the pronoun is in nominative or objective form depends on the meaning of the sentence.

Example:

- a. I love you more than he (loves you).
- b. I love you more than (I love) him.
- c. I shall give you as many pens as (I shall give) him.
- d. I am as intelligent as he (is).

Rule 13: The pronoun used after a “to be” form verb should be in the same case as the noun or pronoun used before the verb.

Example:

- a. It is I.
- b. This is She.

Note: When a clause with *who/which* is used, the pronoun after “to be” is always in the nominative case.

Example:

- a. It is he who is responsible.
- b. It is she who refused the offer.
- c. It is I who saw her yesterday.
- d. It is he who will pay you.

Rule 14: After *let*, *like*, *between*, *but*, *except*, and other prepositions, the objective case is used.

Example:

- a. **Let** me do this work.
- b. Let me clear the doubts, if any.
- c. **Everybody** but him was present for the meeting.

Use of It:

Rule 1: “It” is used for animals, non-living things, countries, and babies. Its plural is “they”.

Example:

- a. Here is your pen. Please take it.
- b. He has a cat. It is very beautiful.
- c. When he saw the child, it was playing.

Rule 2: “It” is used as an introductory subject to express time, weather, temperature, distance, or natural events. In this case, it is called “empty it” because it has no specific meaning.

Example:

- a. It is 7 O’clock.
- b. It is fine.
- c. It is summer.

Rule 3: “It” is also used in place of an infinitive, gerund, or clause.

Example:

- a. It rains.
- b. It blows.

Rule 4: “It” is used as the subject of a sentence to emphasize a noun or pronoun.

Example:

- a. It is you, who can solve this problem.
- b. It is the place where he was murdered.

Rule 5: “It” is used to introduce a phrase or clause.

Example:

- a. **That the Record will break today** is probable.

Rule 6: “It” is used in exclamatory sentences as follows:

Example:

- a. What a beautiful bird it is!
- b. What a large building it is!

Rule 7: The possessive pronoun required here is “its” (without an apostrophe).

It’s = it is

- a. She has been a member of this club since its formation.
- b. It’s impossible to conduct truly causal research on media consumption and suicide.
- c. Now it’s referring to the same big lug who met his fate thanks to David’s slingshot.
- d. The energetic kitten is playful after having its breakfast.
- e. A computer can’t function without its motherboard.

Rule 15: Some transitive verbs require a reflexive pronoun. A transitive verb needs an object, and when no object is present, a reflexive pronoun is used to complete it.

verbs: avail, absent, enjoy, resign, apply, revenge, exert etc.

Example:

- They enjoyed themselves the pleasure of weather.
- Try to avail yourself of every opportunity that comes your way.
- You should avail yourself of this opportunity to demonstrate your skills.

Rule 16: Some verbs, when used intransitively, do not take a reflexive pronoun.

Verbs: Keep, break, set, bathe, make, stop, steal, qualify, move, open, draw, rest, roll, burst, hide, feed, gather, sleep etc.

Example:

- She hid in the room.
- After a long and fun-filled day, the children slept peacefully.

Rule 17: "This" is used for one person or thing that is near, while "these" is used for more than one person or thing that is near.

Example:

- This is a cat.
- These are cats.

Rule 18: "That" is used for one person or thing that is far, while "those" is used for more than one person or thing that is far.

Example:

- That is a book.
- Those are books.

Note: To avoid repetition of a singular noun, "that of" is used, and to avoid repetition of a plural noun, "those of" is used.

Example:

- The climate of Pune is better than that (अर्थ: climate) of Mumbai.
- The streets of Delhi are wider than those (Meaning: streets) of Mumbai.

Rule 19: To avoid repetition of a singular countable noun, "one" is used, and for plural countable nouns, "ones" is used (not "one's").

Example:

- This is the new version, but **that** is an old **one**.
- These are new books, but **those** are old **ones**.

Indefinite Pronoun		
Word	Person	Thing
Some	Someone, somebody	Something
Any	Anyone, anybody	Anything
Every	Everyone, everybody	Everything
No	No one, no body	Nothing
Possessive case	His	Its

Distributive Pronoun

Distributive Pronoun	Meaning
Everyone	Used for more than two
Each	Used for two or more
Either	Used for two or more
Neither	Used for two or more
Any, none, no one	Used for two or more

Rule 20: Each/Either/Neither + of + plural Noun + S.H.V -----

Example:

- Each of** the boys has a note book.
- Each of** the boys has his own pen.

Note: "The" is used before the plural noun after each of/either of/neither of.

Rule 21: When *each* is used as a subject, it is placed after the subject and before the auxiliary verb. The main verb agrees with the subject.

Example:

- We **each** have advised him to give up smoking.

Rule 22: "Both" is used for two persons or things. It is not used in negative sentences.

Example:

- Both** of the two students are guilty.

Rule 23: The third-person singular masculine pronouns (he, his, him) are used with distributive pronouns.

Example:

- Everyone** should obey his parents.
- Neither** of these two students has received his prize.

Rule 23: If a noun of the feminine gender is used after a distributive pronoun in a sentence, it is necessary to use the pronoun 'her'.

Example:

- Neither** of these two girls has deposited her fees.
- Either** of the two girls has received her gift.
- Each** of the girls has donated her pocket money.

Rule 24: If a feminine noun is used after distributive pronouns, then the pronoun "her" must be used.

Example:

- Neither** of them has done his duty.
- Each** of them has forgot his purse.

Rule 25 : When two subjects are joined by *as well as*, *with*, *along with*, *together with*, and *not*, in addition to, but, besides, except, rather than, accompanied by, like, unlike, no less than, nothing but, the possessive pronoun agrees with the first subject.

Example

- The choreographer as well as his entire dance crew was rewarded cash for their outstanding performance.
- Chari along with other astronauts will form the Artemis Team and help pave the way for the next lunar missions.

Who/ Whom: Used for persons

Rule 26: These are used for persons and living nouns. *Who* is used in the nominative case, and *whom* is used in the objective case. *Who* is used with *people* and *those*.

Example:

- a. The children who sang in the choir were applauded by the audience.
- b. This appears to be the handiwork of someone who belongs to a criminal gang.
- c. My elder brother, whom you'll meet later, is a dentist.
- d. Who is the person that you wanted me to contact there?

Which: Used for non-living things or animals.

Example:

- a. He always obeys his parents, which shows his loyalty.
- b. This is the album which I found in the garage.

1. Whose:

Rule 27: *Whose* is used in the possessive case, generally for persons and animals. In some cases, *whose* is also used for non-living nouns.

Example

- a. What is the name of the Swami whose autobiography impressed you so much?
- b. My friend whose leg was fractured has recovered.

Use of "That":

Rule 28: When two antecedents are joined by *and*, and one refers to a person and the other to an animal or thing, *that* is used as a relative pronoun.

- a. **The man** and his **dog** that I saw yesterday have been kidnapped.

Rule 29: *That* is used after the superlative degree.

- a. Mr. Mishra is the **most laborious** man that I have ever seen.
- b. He is the most eloquent speaker that I have ever heard.

Rule 30: When *all* is used for persons, *who/that* is used after it.

- a. All who/that are interested to do this work can start now

Rule 31: When *all* is used for things, *that* is used after it.

- b. All that glitters is not gold

Rule 32: *That* is used after *all* + *uncountable noun*.

- c. All the money that I gave her has been spent.

Rule 33: *That* is used after *everything, nothing, the only, any, all, everyone, none, no, nobody, much, little, the same, the few, the little*.

- a. My father has given me everything that I needed.
- b. My wife has spent the little money that I gave her.

Rule 34: When the verb is clearly understood, *that* is used after *the same* + *noun*.

- a. This is the same man that deceived me.
- b. There was none that didn't support the cause.
- c. This is the book that I wanted to buy.

Rule 35: No preposition is placed before *that*. If a preposition is required, it is placed at the end of the sentence.

- a. We know the hotel that she lives in.
- b. I understand the point that you are hinting at.

Compound relative Pronouns: *Whoever, whosoever, whomsoever, whatever, whichever, whatsoever*, etc., are compound relative pronouns. They are used in a sentence without an antecedent, as the antecedent is included within them.

- **Whatever** - anything which.
- **Whichever** - anything which.
- **Whoever/whosoever** - any person who.
- **Whomsoever** - any person whom.

Example

- a. You can eat whatever you like.
- b. You can take whichever you like.
- c. I shall employ whomsoever you recommend.

ADJECTIVE

Important Adjectives and their uses:

Some/ any

- *Some* is used in affirmative sentences before singular uncountable nouns to indicate quantity in the sense of "some" or "a little," and before plural countable nouns to indicate number in the sense of "some," "a few," or "a little."
- *Any* is used in negative and interrogative sentences before singular uncountable nouns to indicate quantity in the sense of "some" or "a little," and before plural countable nouns to indicate number in the sense of "any," "some," or "a few."

Much/ Many

- *Much* is used before singular uncountable nouns to indicate quantity in the sense of “a lot.”
- 'Many' is used before plural countable nouns to denote a large number.

Each/Every– प्रत्येक

- *Each* is used before a singular countable noun to refer to every one of two or more persons or things.
- *Every* is used before a singular countable noun to refer to each of more than two persons or things.

Fewer/Less/Lesser

- *Fewer* is used for countable nouns to indicate a smaller number.
- *Less* is used for uncountable nouns to indicate a smaller quantity. It should not be used with price or number.
- *Lesser* means less important.

As..... as/So as

- *As.....as* is used in comparative sentences to express similarity or likeness.
- *So.....as* is used in negative sentences to express dissimilarity or unlikeness.
 - ✓ Our passage across the Arabian Sea was as smooth as the timidiest navigator could desire.

Degree of Adjective

- **Positive Degree:**
 - ✓ It is used to qualify one person, place or thing.
 - ✓ No comparison is made in positive degree of adjective.
 - ✓ When the adjective is not comparative, it describes the quality of one person or thing.
- **Comparative Degree**
 - ✓ It is used to compare two persons, places or things.
 - ✓ When the adjective compares only two, it shows a comparison between them.
 - a. Diseases like diabetes and hypertension are repeatedly on the rise and affecting more and more younger individuals.
- **Superlative Degree**
 - ✓ It is used when more than two persons, places or things are compared. It is the highest degree of comparison.
 - ✓ When the adjective compares within a group, it shows comparison among more than two.
 - a. The lack of regular academic sessions has meant that in 2020 the country has had the lowest share of students who have attended educational institutions.

Important rules related to adjective:

Rule 1: “Of” is not used after the following definite numerals: a dozen, a hundred

Example:

- a. We have a dozen pens.
- b. He has a hundred cows.

Rule 2: If definite numerals are used without “a,” they indicate an indefinite number, and “of” must be used.

Ex- a lakh of men, a pair of shoes, a couple of hours.

Example:

- a. We have dozens of pens.
- b. He has hundreds of cows.

Rule 3: The article “the” is used with ordinal numbers.

Example:

- a. The first lesson is on verb.
- b. The first five girls will get the discount on our merchandise.

Rule 4: When comparing an object, that object should be excluded from the comparison.

Example

- He slapped the team into action and they headed for the town at a more leisurely pace.
- The playground was way larger than I had imagined, and in cleaning it, my back began to ache.

Rule 5: With adjectives such as *senior, junior, posterior, superior, inferior, anterior*, the preposition “to” is used. *More or less* is not used with them. These adjectives are derived from Latin. *Elder, prefer, and preferable* also take “to.”

Example

- He always wants to be in the company of those **who** are intellectually superior to him.

Rule 6: When comparing two things, the comparison should clearly be between the same items. Mistakes are often made in such comparisons.

Example

- Chetan’s room is cleaner than Ram’s **room** because Chetan cleans it more often than Ram.

Rule 4: When adjectives of size, shape, age, colour, etc., are used together, they follow this order:

Size → shape → age → colour → emotion
1 2 3 4 5
→ nationality → material → noun
6 7

Example

- The beautiful young girl jumped in the river in the state of depression.

ADVERB

Important adverbs and their uses:

Late/Lately

- **Late** – late → used as both an adjective and an adverb.
- **Lately** – recently → used only as an adverb.

Example

- I haven't seen Akila **lately**.
- Chandni is often **late** for work.
- Riya arrived at the train station **late**.

Hard/ Hardly

- **Hard** – with effort
- **Hardly** – barely

Example

- Sanjana rubbed her eyes **hard**.
- Sushil, who recently joined our school, was awarded the Gold Cup as he worked **hard** throughout the year.
- Mohan is respected by everyone because he works **hard**.

Free/Freely

- **Free** – without cost
- **Freely** – with freedom

Example

- We can move about freely in India.
- Rides are provided free in this water park.

Since

- When *since* indicates time, it is used as a preposition, conjunction, and adverb. As an adverb, *since* means “from then.”

Example

- I have been reading since 5 O' clock.
- They have been playing since 7 O' clock.

Just

- *Just* is used as an adverb of time in the sense of “a moment ago.”
- It is generally used with the present perfect tense.

Example

- He has just gone out.
- I have just had dinner.

Rule 1: *Just* can also be used in the simple past for “exact time.”

Example

- I just caught the train.
- They just managed to leave.

Rule 2: *Just* can also express “just now (time struck).”

Example

- It has just struck five. → It is just five o'clock.
- It has just struck two. → It is just two o'clock.

Just Now

- *Just now* is used for an action completed in the present; it is used with the present perfect tense.

Example

- He has gone just now.
- I have arrived just now.

Rule 1: *Just now* also means “a short time ago” or “a moment ago,” and in this case, it is used with the simple past tense.

Example

- They left home just now.
- Did you hear a noise just now?

Rule 2: *Just now* can also mean “at this moment.”

Example

- I am busy just now.

Presently

- *Presently* – soon / shortly → used for future action.

Example

- He is presently busy.
- He will come back presently.
- I shall give some money presently.

Early

- *Early* is used as both an adjective and an adverb.
- It means “soon after the beginning.”

Example

- Are you an early riser? (adjective)
- We started early. (adverb)

- **It also means “before the fixed time.”**

Example

- He arrived early at the meeting.
- The chief guest came early.

Direct / Directly

- Direct → Straight
- Directly → at Once

Example

- I went direct to my house.
- They went to their room directly.

Too

- *Too* expresses excess, fault, or intensity.
- It is used with unpleasant adjectives.
- **Example:** too cold, too dull, too fat, too naughty
- Too + to infinitive → expresses the reason for not being able to do something.

Example

- The old man is **too** weak **to** walk.
- This question is **too** simple for me to answer.
- His absence from my party is **too painful** for me.

- *Too* also means “also.”

Example

- I lost my pen and book too.
- He was fined too.

Very, Much, Very Much

Rule 1: *Very* is used with adverbs/adjectives in the positive degree.

Example

- His father was very proud of his power over the horse.
- The captain feels very proud as his team has won the match.
- The flowers have a very strong scent.
- She has been speaking four languages very fluently since childhood.

Rule 2: *Much* is used before comparative degree adjectives/adverbs.

Example

- Her concerts are much admired by the foreigners.
- If you are going downhill, you can go much faster.
- Bobo was much richer than Jim as he had illicitly accumulated all his wealth.
- We've got to have beefed-up intelligence, including much stronger human intelligence than before.

Rule 3:

- **The + very + Superlative Degree**
- **Much + the + Superlative Degree**

Example

- You are **the** very **smartest** player in the team.
- You are much **the** **smartest** player in the team.

Rule 4: *Much* is used before the past participle.

Example

- He was much confused to read my letter.
- Sita is much interested in you.

Rule 5: *Very* is used with the present participle.

Example

- The match is very interesting.
- This is a very amusing information.

Rule 6: *Very much* means “completely” and can be used before the comparative degree.

Example

- Ram is very much better than Shyam.

Rule 7: Generally, *very much* is used in affirmative sentences, while *much* is used in negative sentences.

Example

- I love her very much.
- I do **not** love her much.
- He does **not** work much.

Much Too, Too Much

- *Much too* and *too much* express the same meaning: “more than necessary.”
- Usage
 - ✓ Before an adjective or participle → *Much too*
 - ✓ Before a noun → *Too much*

Example

- Too much** of anything is bad.
- It is **much too** painful.
- There is evidence that too much technology can lead to a loss of child development opportunities.

Enough

- *Enough* means “sufficient” or “adequate.”
- It is used as both an adjective and an adverb.
 - ✓ As an adverb → after adjectives/adverbs
 - ✓ As an adjective → before nouns

Example

- The hall was spacious enough to accommodate all the guests.
- The hall was spacious enough to accommodate all the guests
- The food container is not big enough to meet the demands of the affected people.
- She was tall enough to reach the top shelf.
(a) I am not courageous enough to take this risk.

Most, Mostly, Almost

- *Most* – the greatest in amount → used as pronoun, adjective, and adverb
- *Mostly* – mainly
- *Almost* – nearly → used only as an adverb

Example

- Many people attended the party, but most **were** boring. (Pronoun)
- Most **people** at the party were boring. (Adjective)
- This time, she donated most **generously** for the war fund. (Adverb)
- Caramel is made from several thousand compounds, making it one of the **most** **complex** food products.

Fairly / Rather

- *Fairly* → positive sense → fairly, quite, reasonably
- *Rather* → negative sense → somewhat, quite (often unfavorable)

Example

- Milk is fairly hot.
- The weather is rather hot.

No / Not

- No can be both an adjective and an adverb.
- As an adverb → means “not at all” or “not in any degree” → used only before comparative degree
- As an adjective → means “no” → used before positive or comparative degrees

Example

- He has no pen. (pen – noun)
- He has no good pen. (good –adjective of positive degree)
- No other place in this country is **better than** Gulmarg, Kashmir. (No –adverb of comparative degree)

- **Not** → **adverb** → means “not” → used after the helping verb

Example

- I have not any book.
- She does not have any idea.

Rule 1: Some words have the same form as both adverbs and adjectives: fast, straight, outright, direct, hard, late, high, safe, quiet, etc.

- If these words are used before a noun → they function as adjectives
- If these words are used after a verb → they function as adverbs

Example

- He works hard. (Adverb)
- This is a hard task. (Adjective)
- Do not talk loud. (Adverb)
- Riya ran as **fast** as a cheetah and saved the child from falling. (Adverb)

Rule 2: MPT Rule: When multiple adverbs are used in a sentence, the order is: Manner → Place → Time

Example

- She comes regularly at **the ground** daily.
- He is crying loudly **at the field** now.

Note: If multiple adverbs of time are used, the order should be: smallest time → larger time → largest time

Example

- He came here at 7 0' clock in the morning on Monday.
- She was born at 6 0' clock in the evening on Sunday in 1987.

Rule 3: Else is used with but.

Example

- It is nothing **else** but sheer foolishness.

Rule 4: Rather, other, and otherwise are followed by than.

Example

- Rahul had **no other** alternative than to work hard.
- I would **rather** die than beg.

Rule 5: Some adverbs/adverbial expressions cause inversion when placed at the beginning of a sentence. This is called *Adverbial Inversion*.

Examples of such words: *Never, rarely/seldom, hardly/scarcely/barely, no sooner, not only... but also, at no time/under no circumstances, only after/only when/only then*

Example

- Scarcely had I started reading the paper **when** the doorbell rang.
- No sooner had they left **their home than it** started raining heavily.

Rule 6:

- So + adjective / adverb
- So + adjective + a/an + singular noun
- Such + a/an + adjective + singular noun
- Such + adjective + plural / uncountable noun

Example

- Aren't you **so young** to travel by yourself?
- He's not **so friendly as** she is.
- The solution was applied **so effectively** that it resolved the issue immediately.

CONJUNCTION

Rule 1: Both _____ and: When used as a subject, the helping verb is always plural.

Example

- Not only dogs but also cats are available at the animal shelter.
- One must not only have the ability to read voraciously but also have the necessary training in comprehending and remembering all the relevant details.

Rule 2: With along with / together with / as well as / in addition to, the helping verb agrees with the first subject.

Example

- Ram**, along with his friends, is going to Delhi.
- The teacher**, together with the students, was present.
- My father**, as well as my uncles, has arrived.
- The manager**, in addition to his assistants, is responsible.

Rule 3: Not only _____ But Also

1. The same part of speech (noun/pronoun/adjective/adverb/verb) must be used with both parts.

Example

- History is **not only** a very vast subject **but also** very intriguing. (Adjective - adjective)
- One must **not only** have the ability to read voraciously **but also** have the necessary training in comprehending and remembering all the relevant details. (Noun-Noun)

- c. The secretary to my boss is very efficient as he **not only** gives him the required information **but also** handles correspondence independently. (Verb - Verb)
- d. **Not only** is my brother intelligent **but** hard working too. (This is correct without “also”)

2. The helping verb agrees with the second subject.

Example

- a. **Not only** Ram **but also** his friends are coming.
- b. **Not only** the teacher **but also** the students were absent.
- c. **Not only** my brother **but also** my parents have agreed.

Rule 4: Either _____ OR / Neither _____ Nor

1. The same part of speech is used with both parts.
2. The helping verb agrees with the second subject.

Example

- ✓ Either Shilpi or Raj is to blame for the accident.
- ✓ Either the bears or the lion has escaped from the zoo.
- ✓ Neither Sameera nor Vinod knows anything about the accident.
- ✓ The children neither wanted to go back home early from vacation nor to miss their adventures planned for the trip.

Rule 5: When → *When* is used when two actions occur at different times or one action starts after the completion of another.

- **Structure:** Past Perfect tense + When + Past Indefinite

Example

- a. I **had finished** my homework **when** he **came**.
- b. The train **had departed** **when** we **reached** the station.
- c. When he saw the bear, he ran to the nearest tree, dropped his gun and climbed to a safe place.

Rule 6: While → *While* is used when two actions occur at the same time.

- **Structure:** Past Continuous Tense + While + Past Continuous Tense

Example

- a. I **was reading** **while** she **was cooking**.
- b. The children **were playing** **while** their mother **was watching** them.
- c. He **was talking** on the phone **while** he **was driving**.

Rule 7: Before/After – Time

Used when two actions happen at different times, one before or after the other.

- **Structure:** Past Perfect Tense + Before + Past Indefinite
- **Structure:** Past Indefinite Tense + After + Past Perfect Tense

Example

- a. I **had finished** my work **before** he **arrived**.
- b. She **had locked** the door **before** she **went** out.
- c. He **started** the work **after** he **had taken** rest.
- d. We **left** the house **after** we **had eaten** dinner.

Rule 8: Until → *Until* is negative in meaning, so *not* is not used with it.

- The referee allowed the teams to play on without blowing the final whistle until one of them scored a winning goal.

Rule 9: Unless → *Unless* means “if not / until not.” It has a negative sense, so *not* is not used with it.

- I don't want you to give that number to anyone unless it's an emergency, you understand?

Rule 10: As soon as / as Long as → Used to express time or condition.

- **Structure:** Future indefinite + As Soon as / as long as + Present Indefinite

Example

- a. You **will succeed** **as long as** you **work** hard.
- b. I **will help** you **as long as** you **need** me.
- c. As soon as he became a minister, he didn't allow any of his relatives to live with him.

Rule 11: Since → Used to show the starting point of an action that continues up to the present.

- **Structure:** Present Perfect tense + Since + Past Indefinite

Example

- a. I **have lived** here **since** I **came** to Delhi.
- b. She **has been** ill **since** she **fell** sick.
- c. They **have worked** here **since** they **joined** the company.

Rule 12: When *that* or *so that* is used to express purpose, *may/might* is used according to the tense.

Example

- a. He works hard **so that** he **may** succeed.
- b. I am saving money **that** I **may** buy a car.
- c. He worked hard **so that** he **might** pass the exam.

Rule 13: Lest _____ Should: *Lest* is always used with the modal verb *should*. A sentence starting with *lest* is never negative.

Example

- a. Work hard **lest** you **should** fail.
- b. He spoke softly **lest** the baby **should** wake up.
- c. Walk carefully **lest** you **should** fall.

Rule 14: if → For future conditions, the *if*-clause uses present indefinite, and the main clause uses future indefinite.

➤ **Structure:** if + Present indefinite + Future Indefinite

Example

- If you **work** hard, you **will pass** the exam.
- If it **rains**, we **will stay** at home.
- If he **comes**, I **will tell** him the truth.

Rule 15: No Sooner _____ Than → Used when one action happens immediately after another.

Structure: No Sooner + had/did + Sub + V₃/V₁ + than + Sub + V₂

Example

➤ No sooner had I started strolling the lawn than it started raining.

Rule 16: As if → Used for imaginary/unreal situations; the verb takes a past form.

➤ **Present unreal** → *as if* + Past Indefinite

➤ **Past unreal** → *as if* + Past Perfect

Example

- He talks **as if** he **knew** everything.
- She behaves **as if** she **were** a queen.
- He looked at me **as if** he **had seen** a ghost.

Rule 17: Whether _____ or → Used to express choice, doubt, or alternatives.

Example

- Whether** you **like** it **or** not, you must do it.
- Whether** rain **or** shine, the match will be played.
- Whether** **or** not you allow me, I am going to the fair.

Rule 18: Hardly/Scarcely _____ Before/When

➤ **Structure:** Hardly/Scarcely + had + sub + V₃ + Before/When + Sub + V₂

Example

- ✓ Scarcely had the train stopped at the platform when the passengers started pushing each other to enter the train.
- ✓ Estella had hardly heard the news when she began to weep.

Rule 19:

➤ After *doubt*:

- ✓ In affirmative sentences → *if/whether*
- ✓ In negative and interrogative sentences → *that*

➤ After *doubtful*:

- ✓ In affirmative sentences → *if/whether*
- ✓ In negative and interrogative sentences → *that*

Example

- I **doubt if** he will come.
- She **doubts whether** the train will arrive on time.
- I **do not doubt that** he is honest.
- Do you doubt that** she can do this work?
- I am **doubtful whether** he will pass the exam.
- She is **doubtful if** they will agree.
- I am **not doubtful that** he will succeed.

Rule 20:

➤ After *the same*, relative pronouns *that* or *as* are used.

➤ *That* is used when the verb is clearly stated. *As* is used when the verb is not clearly stated.

Example

- This is **the same book that** I bought yesterday.
- He wore **the same shirt that** he **had worn** on Monday.
- This is **the same book as** yours.
- She has **the same pen as** mine.

Rule 21:

➤ *As...as* and *so...as* are used for comparison.

➤ *As...as* is used in both positive and negative sentences.

➤ *So...as* is used only in negative sentences.

➤ Only the positive degree of adjectives/adverbs is used with them.

Example

- Ram is **as** tall **as** Mohan.
- She runs **as** fast **as** her sister.
- He is **not as** clever **as** his brother.
- He is **not so** intelligent **as** his friend.
- She does **not run so** fast **as** her cousin.

Rule 22: But

1. Used when the same subject is involved and there is contrast between actions.

Example

- He is poor **but** honest.
- She worked hard **but** failed.

2. **Used to show unexpected contrast.**

Example

- He is very rich **but** unhappy.
- The medicine was costly **but** ineffective.

3. **Do not use *but* with *however*. Use either *but* or *however*.**

4. ***Else* is followed by *but*.**

Example

- No one **else but** Ram was present.
- Nothing **else but** luck helped him.

Rule 23: Yet

1. As a coordinating conjunction, **yet** means *nevertheless or but*.

Example

- a. He is poor, **yet** he is honest.
- b. She worked hard, **yet** she failed.
- c. It was raining, **yet** they continued the match.

2. **Yet** can also have different meanings:

Meaning of Yet	Example
In addition,	He is strict, yet kind.
Even	Yet a child can do this.
Still	He hasn't come yet .
Eventually	He will succeed yet .
As soon as now	The time has yet to come.

Rule 24: Although

- Although + subject + verb, main clause
- Main clause + although + subject + verb
- Do NOT use "but" with "although" in the same sentence.
- To express contrast, we use "even though" or "although," not just "even."
 - ✓ Psychosis is also part of this debate, even though problems arising from it affect a relatively small number of people.
 - ✓ Right now, the concern is about banks not lowering their lending rates fast enough, although the repo rate has been coming down.
 - ✓ We didn't have a lot of success with the garden, although we worked hard on it.

TENSE

Indefinite tense:

- Actions that happen *at a particular time* are included under this tense.

Present Indefinite tense:

The present indefinite tense (also called simple present tense) is used to describe actions or situations that are **habitual, general truths, or facts** that are always true.

1	Positive form	Subject + V ₁ / es-s + Object
2	Negative form	Subject + do/does + not + V ₁ + Object
3	Interrogative form	Do/does + subject + V ₁ + Object?

- **Regular activity:** Daily/ always / Regularly- He always write a poem.
- **Universal truth:** The sun rises in the east.
- **Hobby / Habit:** I play the guitar.
- **Permanent activity:** Every day / every night- I read a novel once a week.

- **Newspaper headlines / sports commentary:** Sachin strikes a ball beautifully.
- **Temporary action:** I am at a work.
- **Emotions / feeling:** Angry/ Hate/ Love/ Fond / Think etc.

Example

- ✓ Suman and his friend often come here to read books.
- ✓ If it rains tomorrow, we will postpone the outdoor event to ensure the safety and comfort of all participants.

Past indefinite tense:

The past indefinite tense, also known as the simple past tense, is used to describe **actions that happened and were completed at a specific point** in the past.

1	Positive form	Subject + V ₂ + Object
2	Negative form	Subject + did + not + V ₁ + Object
3	Interrogative form	Did + subject + V ₁ + Object?

Example

- As I went near, I saw a very curious sight.
- When he arrived at the party last night, she said she loved the gift, but now she regrets it deeply.
- The number of incomplete projects as compared to the completed ones increased from 10% in 2014 to 18% in 2018.
- He used to play football professionally but he had to quit because of an injury.
- Mahendra Singh Dhoni, over the past decade, heralded a new era for Indian cricket.
- He met his friends from college after so many years that for a while it was hard to identify them.
- Thomas did not bring the vegetables because he was busy.
- If the government were to bring forward plans for a green recovery, Labor would support them.

Future indefinite tense:

The future indefinite tense, also known as the simple future tense, is used to describe actions that will happen in the future. It is used for **predictions, promises, decisions made at the moment of speaking, and future facts**.

- **Will:** He/ She/ It/ They/ You / Noun
- **Shall:** I / We

1	Positive form	Subject + will/shall + V ₁ + Object
2	Negative form	Subject + will/shall + not + V ₁ + Object
3	Interrogative form	Will/ shall + subject + V ₁ + Object?

Example

- Sam shall go to the office tomorrow to get back his original documents lying with the staff.

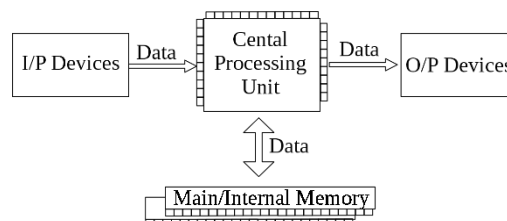
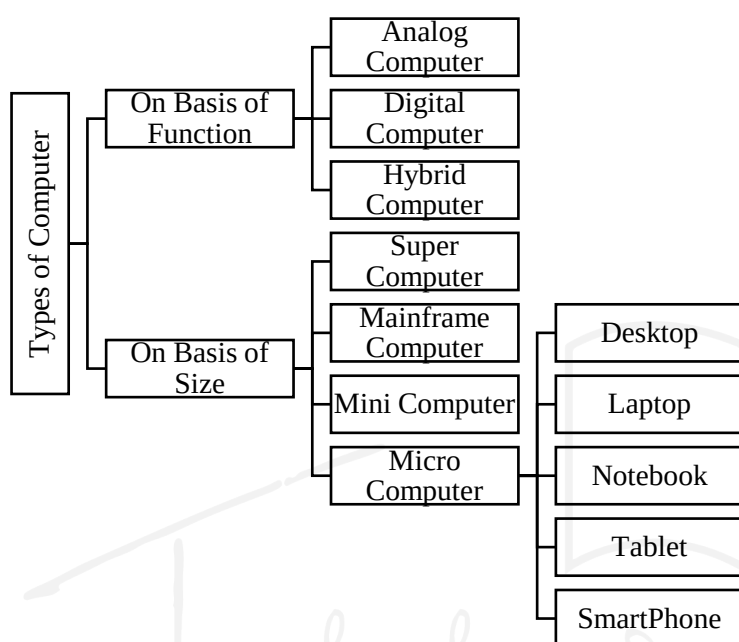
8

CHAPTER

Basic of Computer

“A computer would deserve to be called intelligent if it could deceive a human into believing that it was human.” –**Alan Turing (father of modern computers)**.

A **computer** is an electronic device that can be programmed to **accept data (input)**, **process** it and **generate results (output)**. A computer along with additional hardware and software together is called a computer system.



Types of Computer: On Basis of Function:

- Analog Computer:** Analog computers process **continuous data** and work with **physical quantities** like voltage, temperature, speed, and pressure.
Ex: **Thermometer, Speedometer, Seismograph**
- Digital Computer:** Digital computers process **discrete (binary) data** using **0s and 1s**, performing calculations and logical operations.
Ex: Personal Computer (PC), Laptops, Supercomputers
- Hybrid Computer:** Hybrid computers combine **both analog and digital features**, processing continuous (analog) and discrete (digital) data.
Ex: ECG Machine (Electrocardiogram), Flight Simulators, Weather Prediction System

Types of Computers: On Basis of Size:

Mainframe Computer :

- Mainframes are a type of computer, which are made for **‘throughput’** as fast as possible. Throughput can be defined as **“the rate at which the data is processed”**.
- They are very large in size.
- They have greater processing power and memory as compared to minicomputers.
- Multiple users work at a time on these computers. They are expensive.
- They are generally used in railway reservations, insurance companies, research institutes and professional organizations.
- IBM 4300, IBM4381, UAX 8842 etc are examples of mainframe computers.

➤ **Historical Overview :**

- ✓ First Mainframe Computer: Harvard Mark I (1944).
- ✓ IBM 700 series (1950s-60s) revolutionized mainframes.
- ✓ **Gene Amdahl** is widely considered the "father of the mainframe computer" and played a key role in the design of IBM's mainframe computers, including the IBM 704.

Mini computer :

- A Minicomputer is a mid-sized computing device that is more powerful than a microcomputer but less powerful than a mainframe. It is designed for multi-user operations
- They have more processing power and storage capability. They have more than one CPU. More than one person can work upon them at a given time.
- They are generally used in big offices, banks etc.
- **Historical Overview :**
 - ✓ **First Minicomputer: PDP-8** (1965) by Digital Equipment Corporation (DEC).

- ✓ **1970s & 1980s:** Minicomputers became popular in **businesses, research institutions, and industry.**
- ✓ **Modern Minicomputers:** Still used in **networking, industrial automation, and cloud computing.**

Micro computer :

- A Microcomputer is the smallest and most commonly used type of computer designed for individual use.
- They are small in size and less costly.
- They are used at homes, in schools. A micro computer consists of a single CPU.
- They have comparatively less memory and working speed.
- A single person can work on it at a given time. They are also called personal computers.
- **Historical Overview :**
 - ✓ **First Microcomputer: Micral (1973)** – First commercially available microcomputer.
 - ✓ **Popularized by: Apple I (1976), IBM PC (1981).**
 - ✓ **Modern microcomputers:** Now include **desktops, laptops, notebooks, tablets, and smartphones.**

Types of Microcomputers		
Type	Description	Example
Desktop Computer	A stationary computer designed for office and home use, requiring an external monitor, keyboard, and mouse.	Dell OptiPlex, HP Pavilion, Apple iMac
Laptop	A portable computer with a built-in keyboard, display, and battery, used for personal and professional tasks.	MacBook Air, Lenovo ThinkPad, Dell XPS
Notebook	A thinner, lightweight version of a laptop with similar functionality but improved portability.	ASUS ZenBook, HP Spectre, Dell XPS 13
Tablet	A touchscreen-based, portable computing device that runs mobile operating systems.	Apple iPad, Samsung Galaxy Tab, Microsoft Surface
Smartphone	A mobile computing device with a touchscreen, calling features, and internet connectivity.	iPhone, Samsung Galaxy, Google Pixel
Personal Digital Assistant (PDA)	A small handheld device used for organizing personal information, now mostly replaced by smartphones.	Palm Pilot, BlackBerry PDA
Gaming Console	A microcomputer designed specifically for gaming and multimedia applications.	Sony PlayStation, Microsoft Xbox, Nintendo Switch
Embedded Computer	A specialized microcomputer embedded in electronic devices for a specific function.	Smart TVs, ATMs, Car GPS Systems

Supercomputer:

- Supercomputers are the largest in size. They are the most powerful in processing and memory.
- They process complex calculations with high accuracy.
- A Supercomputer is the most powerful and fastest type of computer, capable of performing trillions of calculations per second.
- It is used for complex computations in scientific research, artificial intelligence, and large-scale simulations.
- FLOPS [Floating Point Operation Per Second] is the unit of measurement for speed.
- **Historical Overview:**
 - ✓ **First Supercomputer: CDC 6600 (1964)**, developed by **Seymour Cray (Father of Super Computer)**.
 - ✓ **Cray-1 (1976)**: Introduced vector processing technology.
 - ✓ **Modern Supercomputers**: Use **parallel processing**, **AI**, and **quantum computing** to enhance speed.

Supercomputer in India:

India has developed several high-performance supercomputers for scientific research, weather forecasting, artificial intelligence, and space exploration. These systems are developed by organizations like C-DAC (Centre for Development of Advanced Computing), ISRO, and IITs.

Historical Overview:

- India launched its own supercomputing program in 1988, under the leadership of Dr. Vijay Bhatkar (Father of supercomputers in India).
- The Centre for Development of Advanced Computing (C-DAC) was established in 1988 to develop indigenous supercomputers.
- **PARAM 8000 – India's First Supercomputer (1991) :**
 - ✓ Developed by: C-DAC.
 - ✓ Processing Power: 1 GFLOP (Giga Floating Point Operations Per Second).
 - ✓ Significance: Marked India's entry into the global supercomputing race.
 - ✓ Impact: Led to technological self-reliance in high-performance computing.
- **National Supercomputing Mission (NSM) :**
 - ✓ Launched in 2015 to develop world-class supercomputing infrastructure in India.
 - ✓ **Objective:** Build indigenous supercomputers and deploy them in academic institutions for research.
 - ✓ **Implemented by:**
 - C-DAC (Centre for Development of Advanced Computing).
 - DST (Department of Science & Technology).
 - MeitY (Ministry of Electronics & Information Technology).
 - ✓ **Target:** Install **70+ supercomputers across India.**

List of Major Supercomputers in India			
Supercomputer Name	Institution	Processing Power	Application
PARAM Siddhi-AI (Top 100-150)	C-DAC (Pune)	5.267 PFLOPS	AI, Drug Discovery, Deep Learning
Pratyush	IITM Pune	4.0 PFLOPS	Weather & Climate Research
Mihir	NCMRWF, Noida	2.8 PFLOPS	Meteorological Simulations
EKA	CRL, Pune (Tata Group)	172 TFLOPS	AI & Scientific Computing
SAGA-220	ISRO	220 TFLOPS	Space Research & Aerospace Simulations
PARAM Yuva-II	C-DAC	500 TFLOPS	General Research & Data Analysis
PARAM Brahma	IISER Pune	850 TFLOPS	Scientific Research
PARAM Yukti	JNCASR (Bangalore)	450 TFLOPS	Molecular & Material Science
PARAM Shivay	IIT-BHU (Banaras Hindu University)	833 TFLOPS	Academic Research & Data Science

PARAM Sanganak	IIT Kanpur	1.6 PFLOPS	AI & Deep Learning
PARAM Pravega	IISc Bangalore	3.3 PFLOPS	Scientific Research & Cloud Computing
Flosolver MK6	NAL (National Aerospace Laboratories)	50 TFLOPS	Aerospace & Fluid Dynamics

Development of Computer

Year	Descriptions
1617 AD	Napier's Bones ➤ A manually operated calculating device. ➤ Invented by Scottish mathematician John Napier. ➤ Used for multiplication and division. ➤ A tool to simplify complex calculations, considered one of the most significant advancements in the study and practical applications of mathematics.
1642 AD	Pascaline ➤ Also known as the Adding Machine. ➤ Invented by Blaise Pascal. ➤ Used for addition and subtraction only. ➤ Operated based on the principles of a clock and odometer.
1694 AD	Leibniz Wheel ➤ Considered an improved version of Pascaline. ➤ Developed by Gottfried Wilhelm von Leibniz. ➤ Capable of performing basic mathematical operations (addition, subtraction, multiplication, and division).
1801–1805	Punch Cards ➤ Developed by Joseph Jacquard for use in mechanical looms. ➤ First mechanical loom that used punched cards to store weaving designs. ➤ Played a crucial role in the development of computers based on two key ideas: ✓ Information was coded using punch cards. ✓ Stored data and instructions on punch cards functioned as a program.
1822 AD	Difference Engine ➤ A gear, shaft, and steam-powered machine. ➤ Invented by Charles Babbage. ➤ The first error-free device for mathematical and statistical calculations. ➤ Used for creating mathematical tables and could perform 60 additions per minute. ➤ Had memory capability and operated based on programmed instructions.
1833 AD	Analytical Engine ➤ In 1833 AD, Charles Babbage developed an advanced version of the Difference Engine, known as the Analytical Engine. ➤ It was capable of operating based on instructions stored on punch cards. ➤ The punch cards were used not only to store instructions but also to record input and output data. ➤ A key feature of this machine was its ability to perform calculations up to the 50th decimal place. ➤ It could also compute the square root of whole numbers, and the results were automatically printed. ➤ Memory was used for data storage in this machine. ➤ It had separate devices for input and output operations.

1889–1890 AD	Hollerith Census Tabulator ➤ A punch card-based census machine. ➤ Developed by American mathematician Herman Hollerith. ➤ Introduced the concept of punch cards as a computing tool, pioneered by Herman Hollerith.
1939–1942	ABC Computer (Atanasoff-Berry Computer) ➤ Developed by: John Atanasoff and Clifford Berry. ➤ First fully automatic electronic digital computer. ➤ Work on this computer continued from 1939 to 1942, and in 1942, it was released in England by John Atanasoff and Clifford Berry.
1944 AD	MARK-I ➤ Inventors & Developers: Howard Aiken & IBM (International Business Machines). ➤ World's first fully automatic electro mechanical calculating machine. ➤ Used for performing complex mathematical calculations. ➤ Full name: Automatic Sequence Controlled Calculator (ASCC). ➤ Capabilities: ✓ Could perform multiplication in 6 seconds. ✓ Could perform division in 12 seconds.
1946 AD	ENIAC (Electronic Numerical Integrator and Computer) ➤ Developed by: A team of scientists at the University of Pennsylvania led by J. Presper Eckert and John William Mauchly. ➤ World's first fully electronic computer.
1947 AD	EDVAC (Electronic Discrete Variable Automatic Computer) ➤ Developed by: John von Neumann. ➤ Capable of storing data and instructions in binary form (0s and 1s). ➤ First stored-program digital computer.
Some Important Facts ➤ Lady Ada Augusta ✓ The first woman to program the Analytical Engine. ✓ She is known as the world's first programmer. ✓ She is also credited with the invention of the binary system. ➤ John von Neumann: ✓ Introduced the concept of logical design with stored programs. ✓ Credited with storing data and instructions in binary form. ✓ He is known as the Father of Modern Computers. The concept of stored program states that a program and memory can be stored in the same memory.	
1949 AD	EDSAC (Electronic Delay Storage Automatic Calculator) ➤ Developed by Professor Maurice Wilkes at Cambridge University. ➤ It was the first stored-program digital computer.
1951 AD	UNIVAC (Universal Automatic Computer) ➤ Developed by General Electric Corporation. ➤ Designed by John Mauchly and J. Presper Eckert. ➤ First commercial computer used for business and general-purpose applications.