Day - 2

* **Flowchart and Pseudo Code :**
↓
⇒ Diagramatical representation.

coder

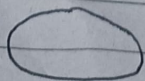compiler ←

C++, Java, python

Binary
M/C
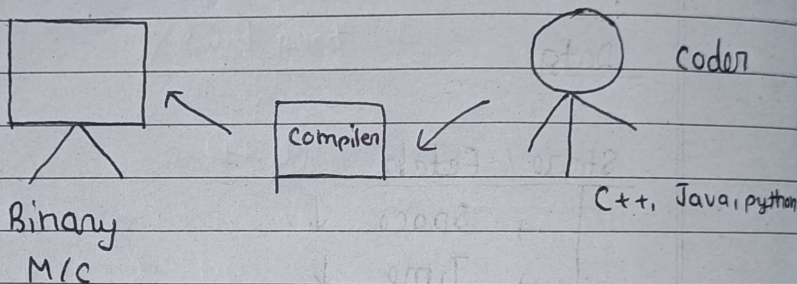
Steps to solve a problem:
⇒ First, understand the problem.
⇒ Check, what are the given values.
⇒ Make a approach.
⇒ Code the approach.
⇒ Debug the errors.
⇒ Check the other more optimized soluti-
ons.

Instruction (Pseudocode)

⇒ ① → Ek baar skikha di machine ko.

Flowchart

① → Terminal
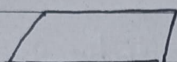
② ▱ — Pa (I/p, O/p)
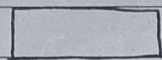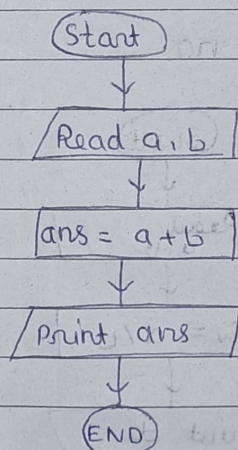
③ ▭ — Process

④ ◇ — Decision

⑤ ⇄ — Arrow

Ex: Sum of 2 no.

(Start)
↓
/Read a, b/
↓
|ans = a+b|
↓
/Print ans/
↓
(END)

Homework

①. Product of two no.
② Divide 2 no.

① Product of 2 no.
⇒ Read 2 no. a & b.
⇒ product = a * b
⇒ print product

```
                    ( Start )
                        |
                        v
              +-------------------+
              | Read              |
              |      a & b        |
              +-------------------+
                        |
                        v
              +-------------------+
              | Prod = a * b      |
              +-------------------+
                        |
                        v
              / Print prod.      /
                        |
                        v
                    ( END )
```

(2)   Divide   2   no.

```
                    ( Start )
                        |
                        v
              / Read             /
              /      a,b         /
                        |
                        v
              +-------------------+
              | Div = a / b       |
              +-------------------+
                        |
                        v
              / Print div        /
                        |
                        v
                    ( END )
```
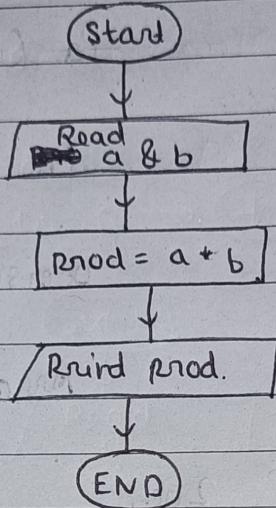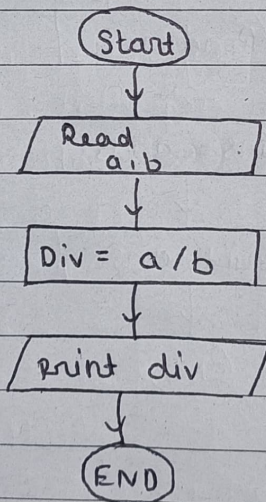
Pseudocode

=)   Read   a , b
=)   div =   a / b
=)   print div.

⇒ MNC → Interview Crack
   1 lakh / year , Package =

Flowchart:
- Start
- Read Package
- Pkg < 10 ?
  - Yes → Print Reject
  - No → Print Accepted
- END
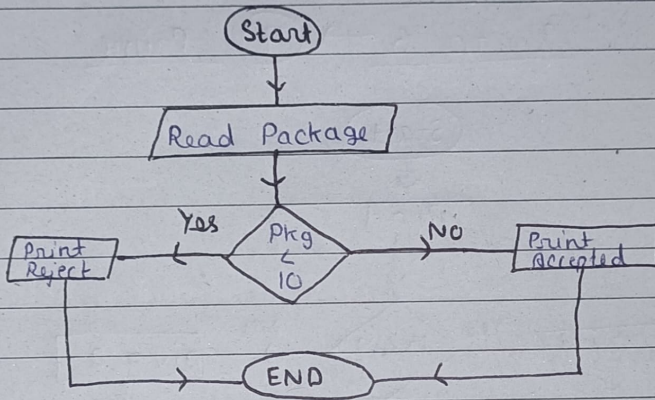
⇒ % → Modulo Operator
   (Give the remainder)
   Ex: $6 \% 2 = 0$

⇒ LOOP: Repeating something.

Flowchart:
- Start
- Read num, h
- Count = 1
- count ≤ h ?
  - Yes → Print num → Count++
  - No → END

① Prime no.

→

$(2 \text{ to } n-1)$ $\nearrow h$

$\underline{2 \text{ to } 6} \longrightarrow ⑦ \;\; \underline{Prime}$

```
              ( Start )
                 │
                 ▼
             / Read /
            /   n   /
                 │
                 ▼
```

Print not prime ←── Yes ──◇ n < 2 ◇── NO ──→ | Div = 2 |

↓

(END)

```
                                    ┌─────────┐
                                    │  Div++  │
                                    └─────────┘
                                         ▲
                                         │ NO
        No                   Yes         │
Print ←─◇ Div < n ◇────→ ◇ n % Div = 0 ◇
prime                                    │
  │                                      │ Yes
  ▼                                      ▼
(END)                            Print not prime
                                         │
                                         ▼
                                       (END)
```