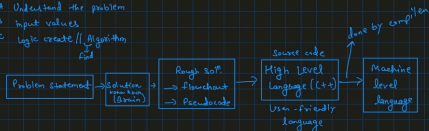


→ Algorithm is a series of steps to solve a given problem

→ How to approach a problem?  
Thought process

Steps

- Understand the problem
- Input values
- Logic create // Algorithm



Is C++ a Middle level language?

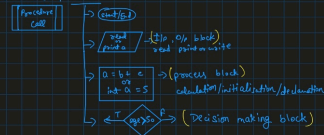
→ Prime no., no. which is divisible by itself and by 1 only.  
Ex → 17 is a prime no. or not

$17 \div 2 \neq 0$   $17 \div 3 \neq 0$  ...  $17 \div 16 \neq 0$   
So, 17 is a prime no.

→ Flowchart

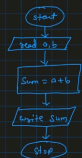
A flowchart is a type of diagram that represents an algo., workflow or process.

→ Flowchart components

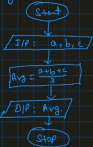


" → " this arrow shows flow of execution

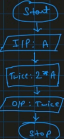
Q1) Print Sum of a & b



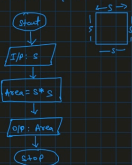
Q2) Avg. of a, b and c



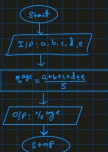
Q3) Print twice of A



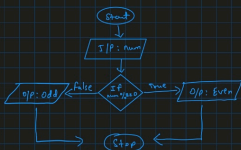
Q.4) Find Area of Square



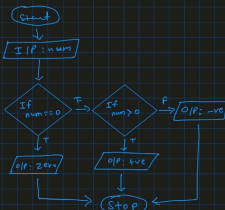
Q.5) Calculate Overall Judge from marks (5 subjects)



Q.6) Check num is Even or Odd



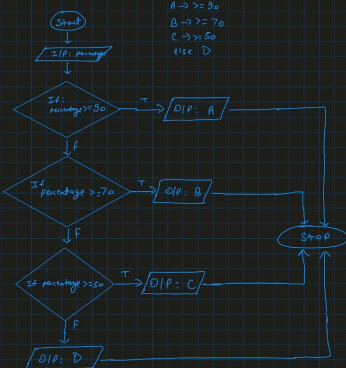
Q.7) Check +ve, -ve or 0



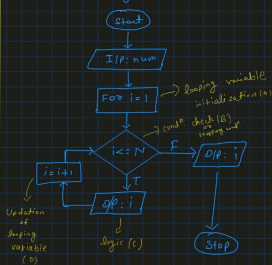
We can also check first that num is +ve or -ve and then check it is zero or not.

Q.8) Student and Grade Flowchart

A → >= 90  
B → >= 70  
C → >= 50  
else D



Q.9) Print Counting from 1 to N



Ex: N = 5

i = 1

1 <= 5

Time point 1

1) i = 1 + 1 = 2

2 <= 5

Time point 2

2) i = 2 + 1 = 3

3 <= 5

Time point 3

3) i = 3 + 1 = 4

4 <= 5

Time point 4

4) i = 4 + 1 = 5

5 <= 5

Time point 5

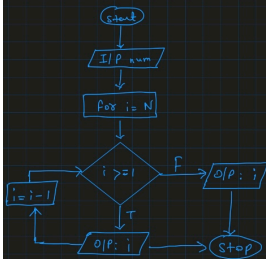
5) i = 5 + 1 = 6

6 <= 5

False, stop

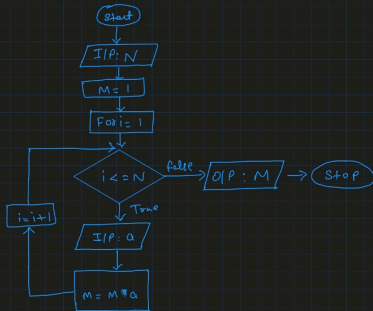
→ We can also take i > N as the cond.

Q.10) Print counting from  $N$  to  $1$

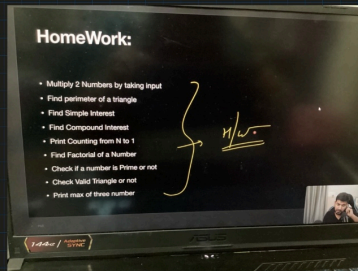
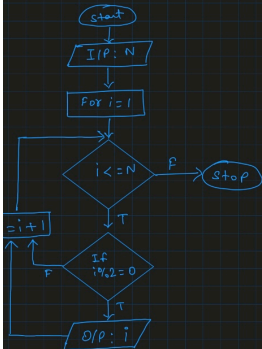


We can also take  $i < 1$  as cond<sup>n</sup>.

Q.11) Multiply  $N$  numbers from user



Q.12) Print even no. from  $1$  to  $N$



H.W.  
What is LLL, MLL and RLL?