DSA (Data structures & Algorithms)

Good DSA Concepts → leads to → Good Problem Solver

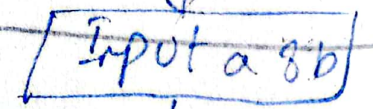
DS

- Primitive
- Non-Primitive
  - Linear
    - static
      - Arrays
    - Dynamic
      - vector
      - Linked List
      - stack
      - queue
  - Non-Linear
    - Tree
    - Graph
    - Table
    - Set

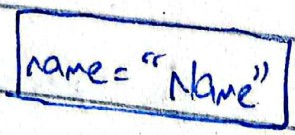
Flowchart & Pseudocodes

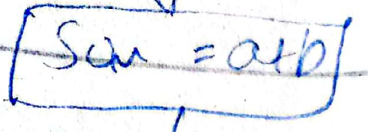
Diagram of solution

Input/Output

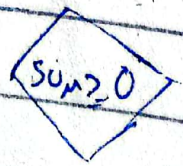


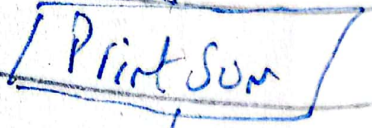
Process





Decision





نقلی کوڈ

Pseudocodes نقلی کوڈ

General logic of solution irrespective of the language.

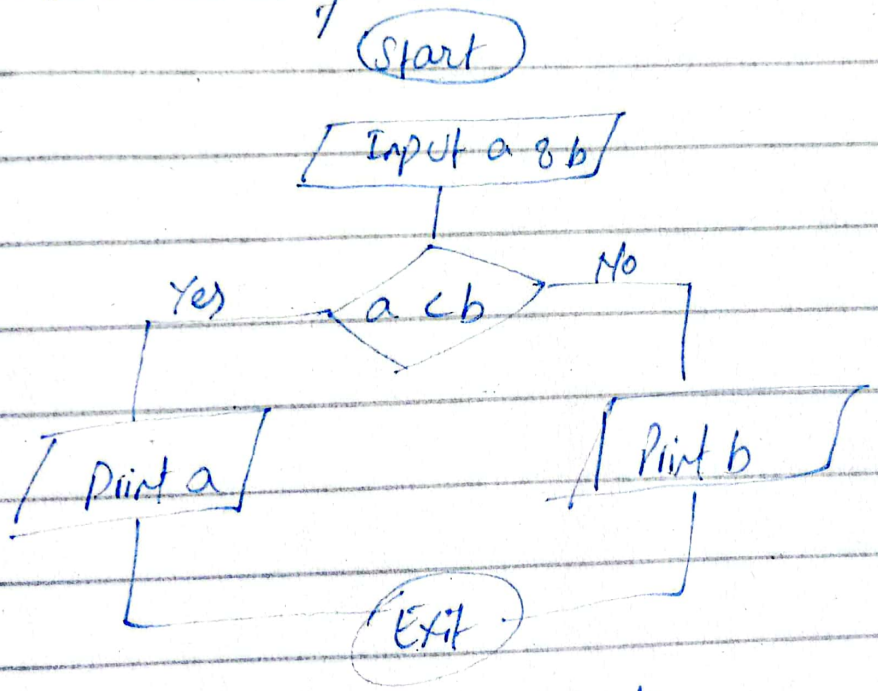
written in different steps.

Example:-

1. Input a and b
2. sum = a + b
3. print sum
4. Exit

steps could be different but the logic will remain the same.

① → Min of 2 Number



① Input a and b

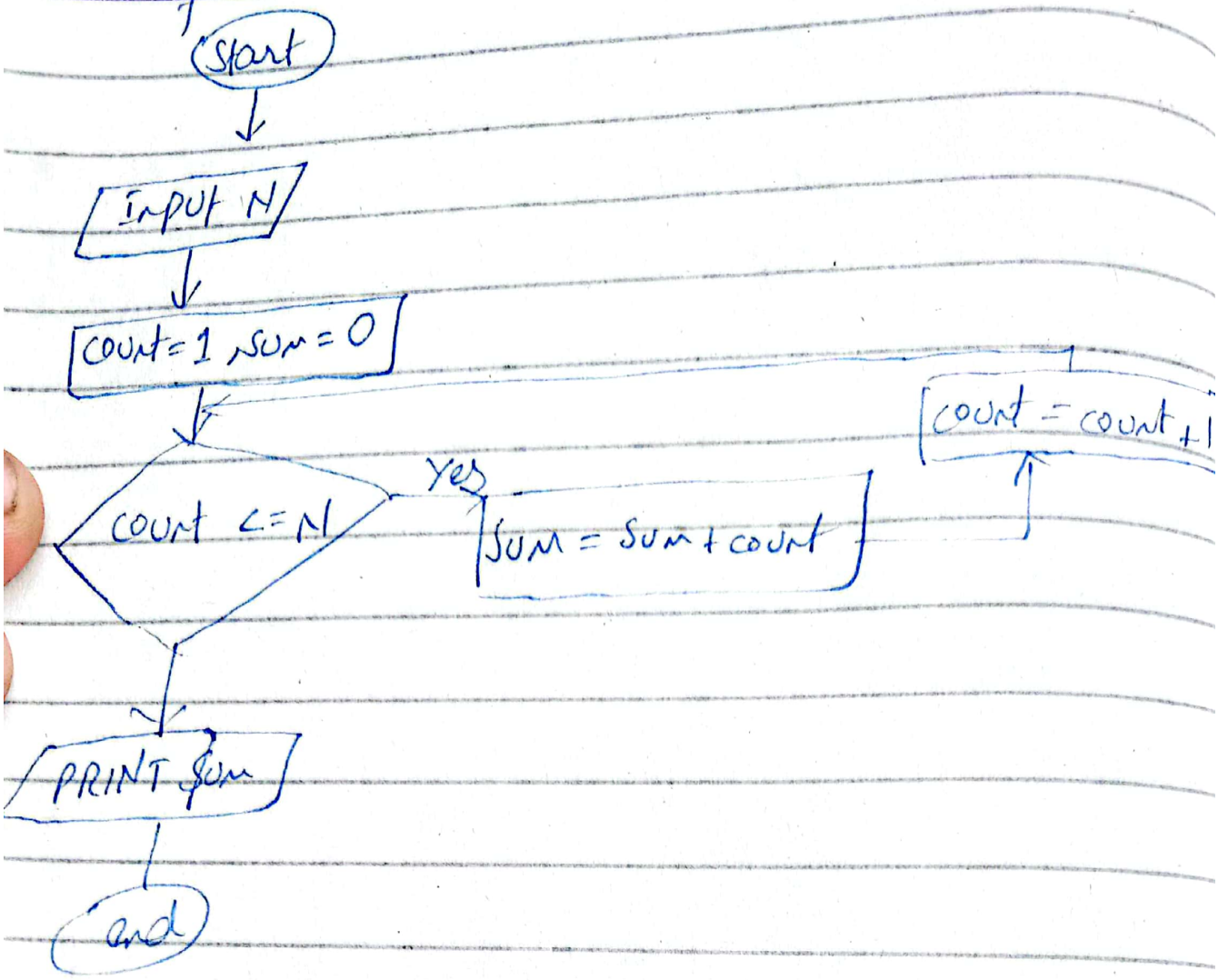
② if a a<b

print a

③ else

Print b

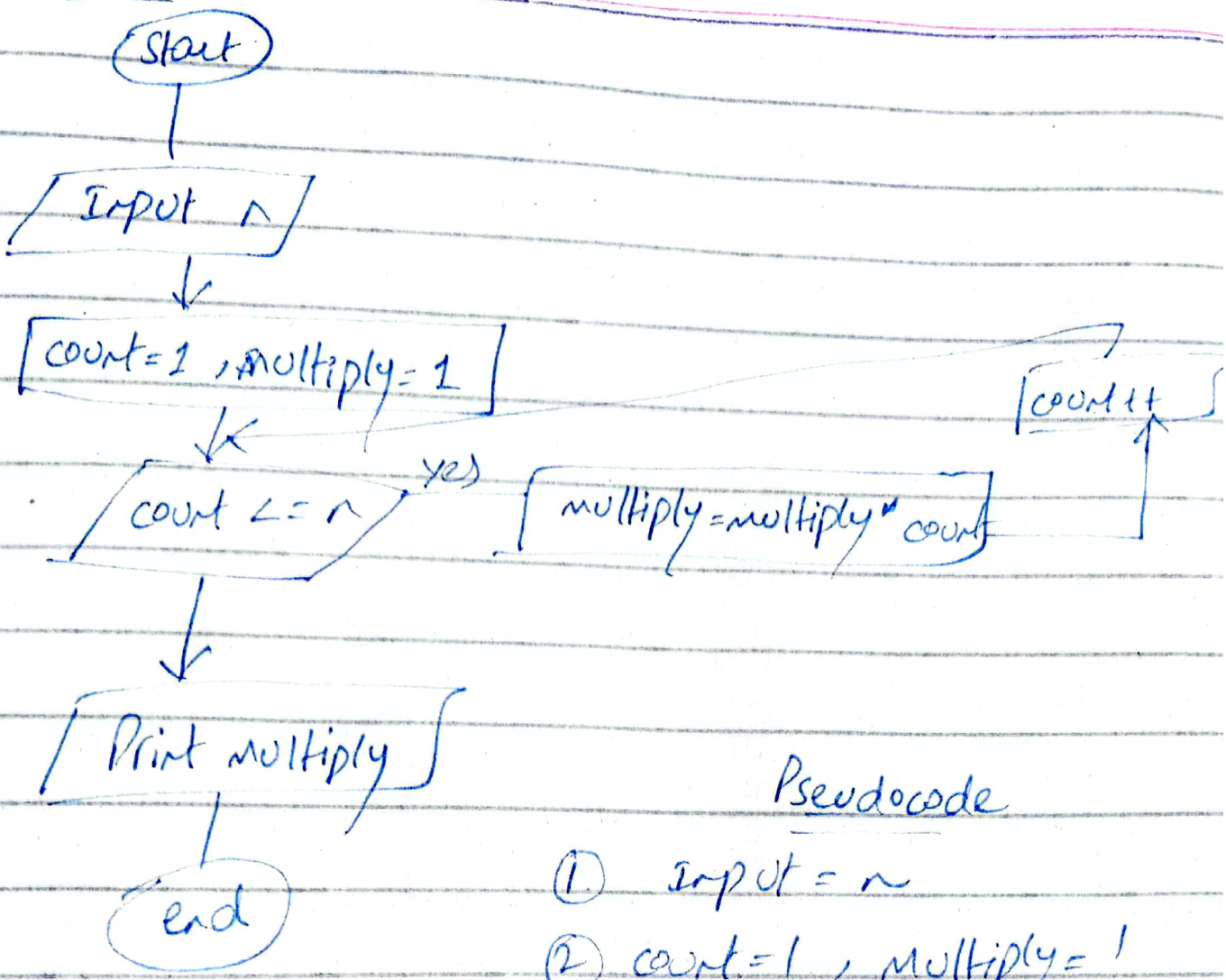
Sum of Numbers upto N



Pseudocodes

1. Input = n
2. count = 1, sum = 0
3. while count <=N
   sum = sum + count
   count = count + 1
4. Print sum
5. Exit

Factorial



Pseudocode

1. Input = n
2. count=1 , multiply=1
3. while count <= n
   multiply = multiply * count
   count = count + 1
4. print multiply
5. Exit