Assignment - 2

① Print even number blw 0 and 99.
   ① start
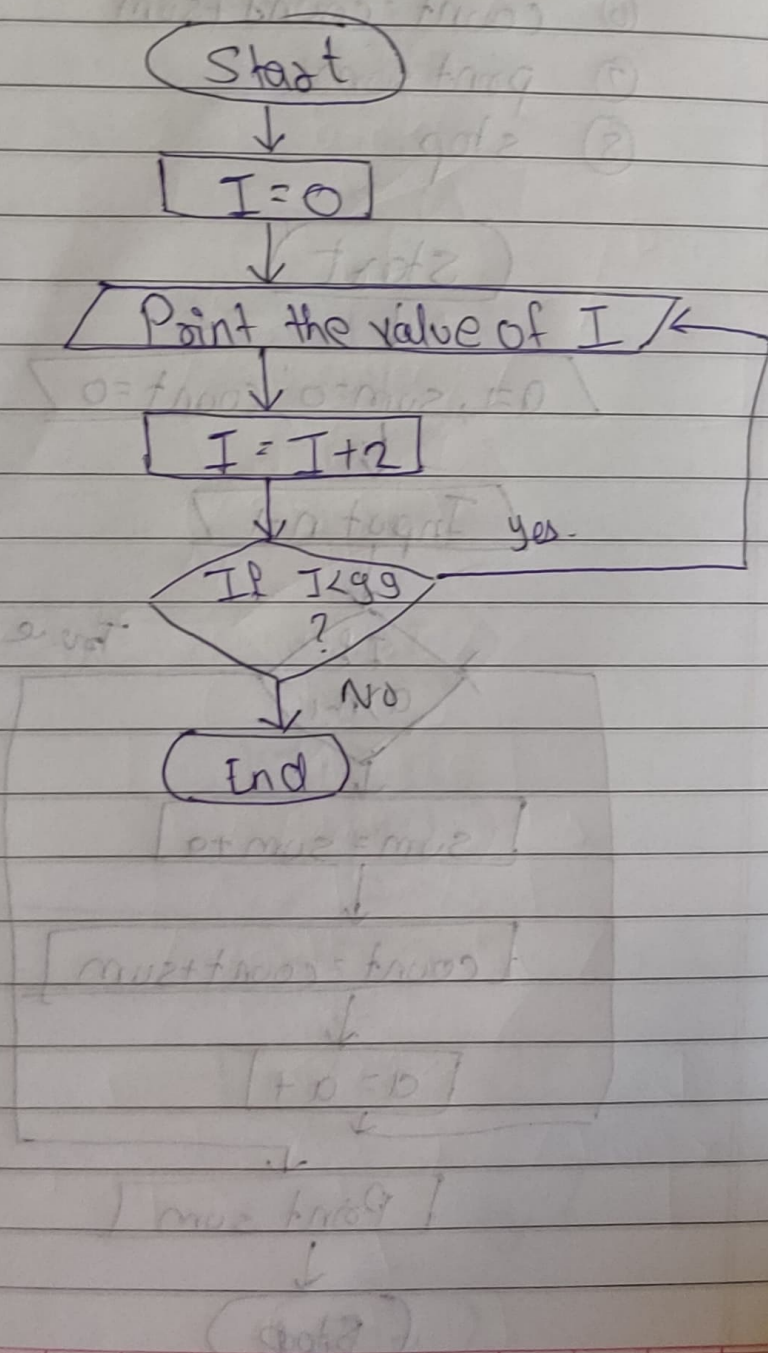   ② $I \leftarrow 0$
   ③ Print the value of I
   ④ $I \leftarrow I + 2$
   ⑤ If $(I < 99)$ then go to:
   ⑥ Stop

$$\boxed{Start}$$
↓
$$\boxed{I = 0}$$
↓
Print the value of I ←
↓
$$\boxed{I = I + 2}$$
↓   yes.
If $I < 99$?
↓ No
$$\boxed{End}$$

② Point odd no. less than a given number
it should also calculate their sum and count.

→   ① : Start
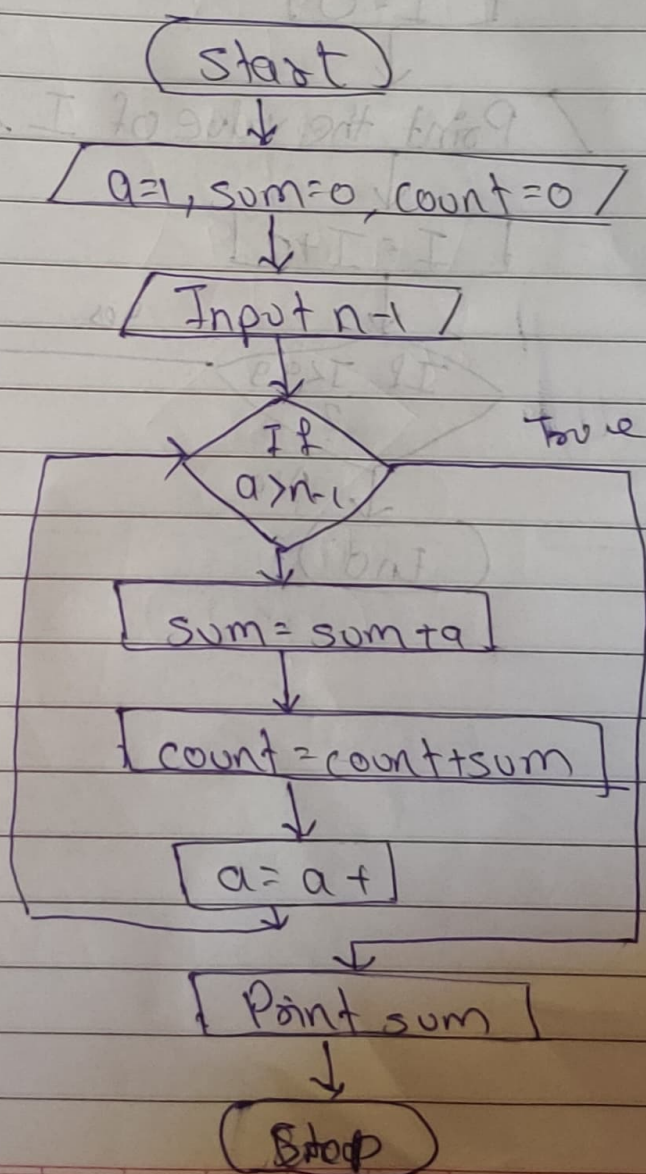   ② Let $a = 1$, sum $= 0$, count $= 0$
    ③ Input $n = 1$
    ④ If $a > n-1$ then go to step 8
    ⑤ sum $=$ sum $+ a$
    ⑥ count $=$ count $+$ sum
    ⑦ print sum
    ⑧ stop

```
        ( Start )
            ↓
  / a=1, sum=0, count=0 /
            ↓
    / Input n-1 /
            ↓
          / If \          true
          \ a>n-1 /
            ↓
    | sum = sum +a |
            ↓
  | count = count+sum |
            ↓
      | a = a + |
            ↓
    | Point sum |
            ↓
        ( Stop )
```

③ Calculate the average of 25 test score.
① : Start
② : Let I = 1, N = 25, sum = 0
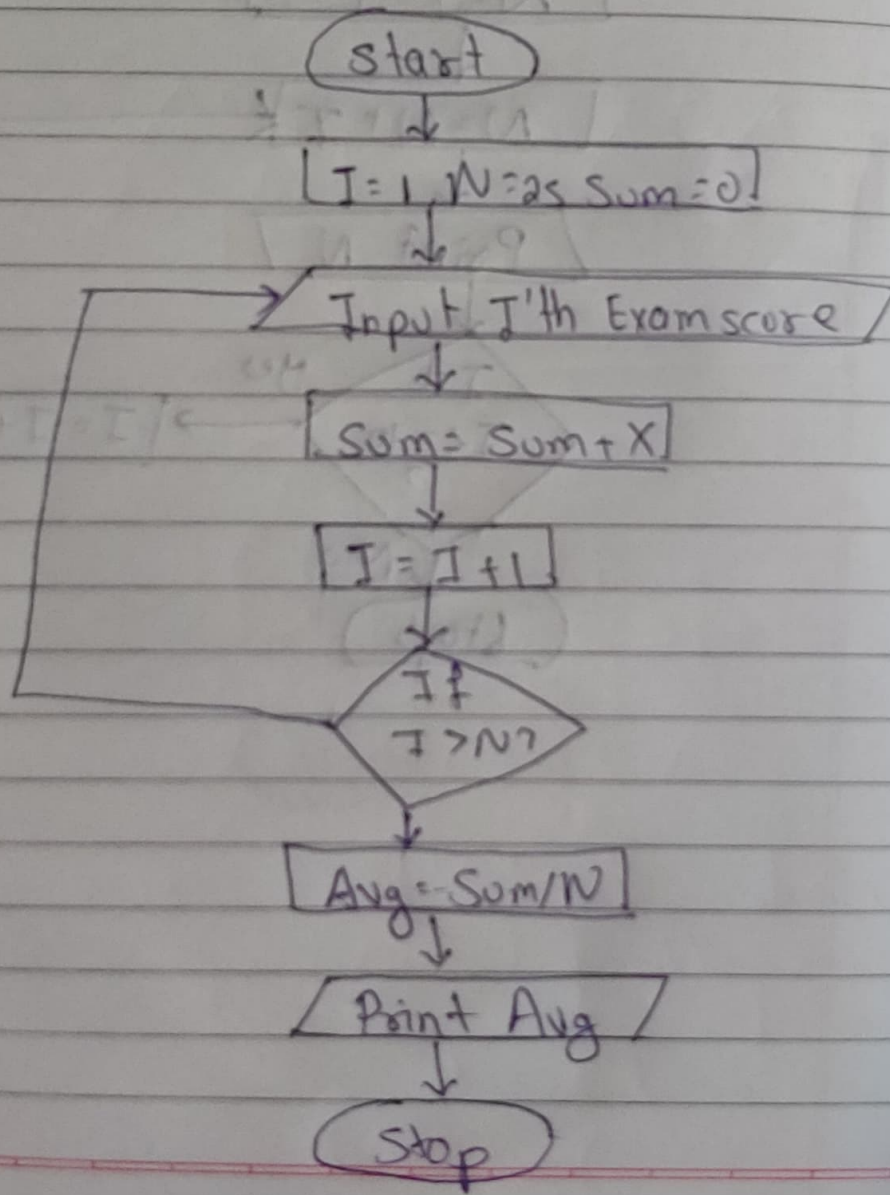③ : Enter the value of I (let consider x)
④ : Sum = Sum + X
⑤ : J = I + 1
⑥ : If I > N then go to step 3
⑦ : avg = sum / N
⑧ : print avg
⑨ : Stop

```
        ( start )
           │
           ↓
  | I = 1, N = 25 Sum = 0 |
           │
           ↓
  / Input I'th Exam score /
           │
           ↓
    | Sum = Sum + X |
           │
           ↓
      | J = I + 1 |
           │
           ↓
        < If
         I > N? >
           │
           ↓
    | Avg = Sum/N |
           │
           ↓
    / Print Avg /
           │
           ↓
       ( Stop )
```

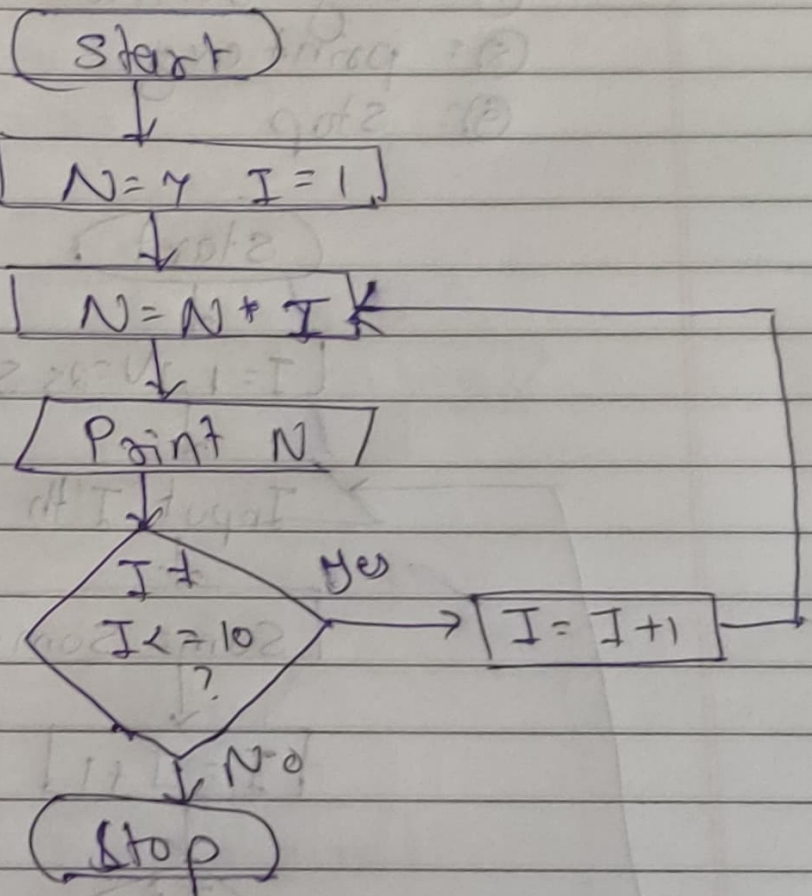(4) Print the table of any number (say 7)

    ① Start

    ② Declare $N \leftarrow 7$, $I \leftarrow 1$

    ③ $N \leftarrow N+1$

    ④ Print N

    ⑤ Check if $(I \leq 10)$ then $J \leftarrow I+1$ goto ③

    ⑥ Stop

```
          ( Start )
              |
              v
      | N = 7   I = 1 |
              |
              v
      | N = N * I | <------------------+
              |                        |
              v                        |
       / Print N /                     |
              |                        |
              v                        |
           / I \          Yes          |
          / I<=10 \ ----------> | I = I+1 |
           \  ?  /
              |
              | No
              v
          ( Stop )
```

⑥ Print odd No. backward from 99 to 1

① Start
② I ← 99
③ print the value of I
④ I ← I - 2
⑤ If (I >= 1) then goto step 3
⑥ Stop.

```
         ( Start )
             ↓
        [  I = 99  ]

    / Print value of I /  ←─────────┐
                                    │
        [  I = I - 2  ]             │
             ↓                      │
            /\                      │
           / It \      yes          │
           \ I>=1 /  ───────────────┘
            \/
             ↓ No
         ( Stop )
```