1. Write the Algorithm and draw the flowcharts for the following :

    a) Print even numbers between 0 and 99
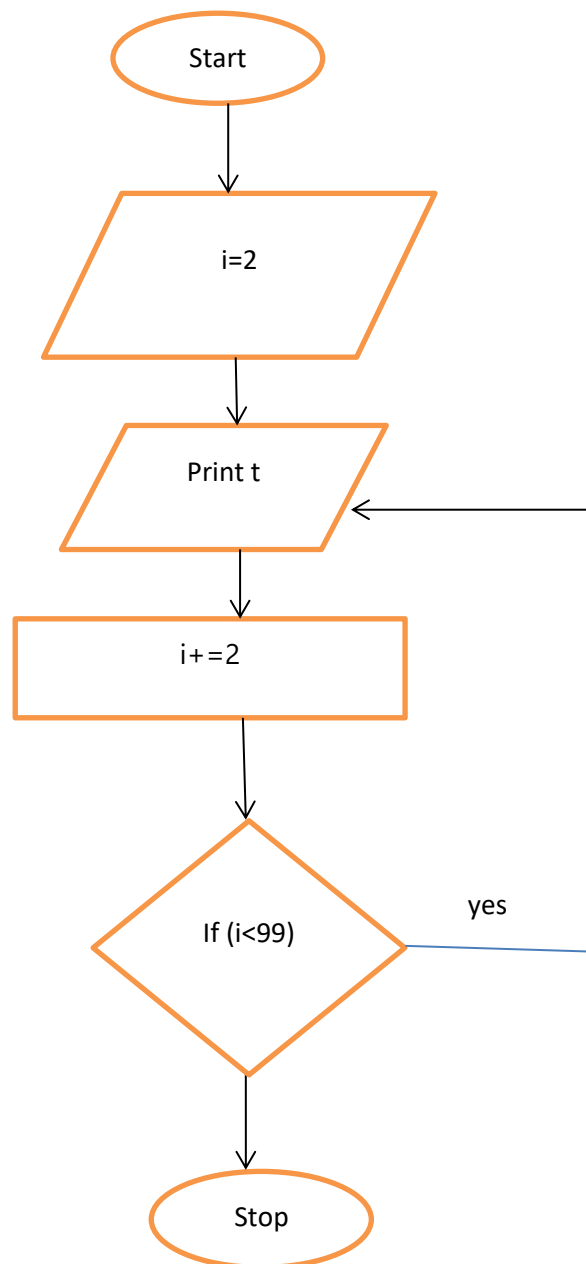   Step 1- start
        Step 2- i=2
        Step 3- print the value of (i)
        Step 4- i+=2
        Step 5-if (i<99) then go to step 3
        Step 6- End

```
        ( Start )
            |
            v
        / i=2 /
            |
            v
        / Print t /   <---- yes
            |               |
            v               |
       | i+=2 |             |
            |               |
            v               |
        < If (i<99) > ------
            |
            v
        ( Stop )
```

b) Print odd numbers less than a given number. It should also calculate their sum and count

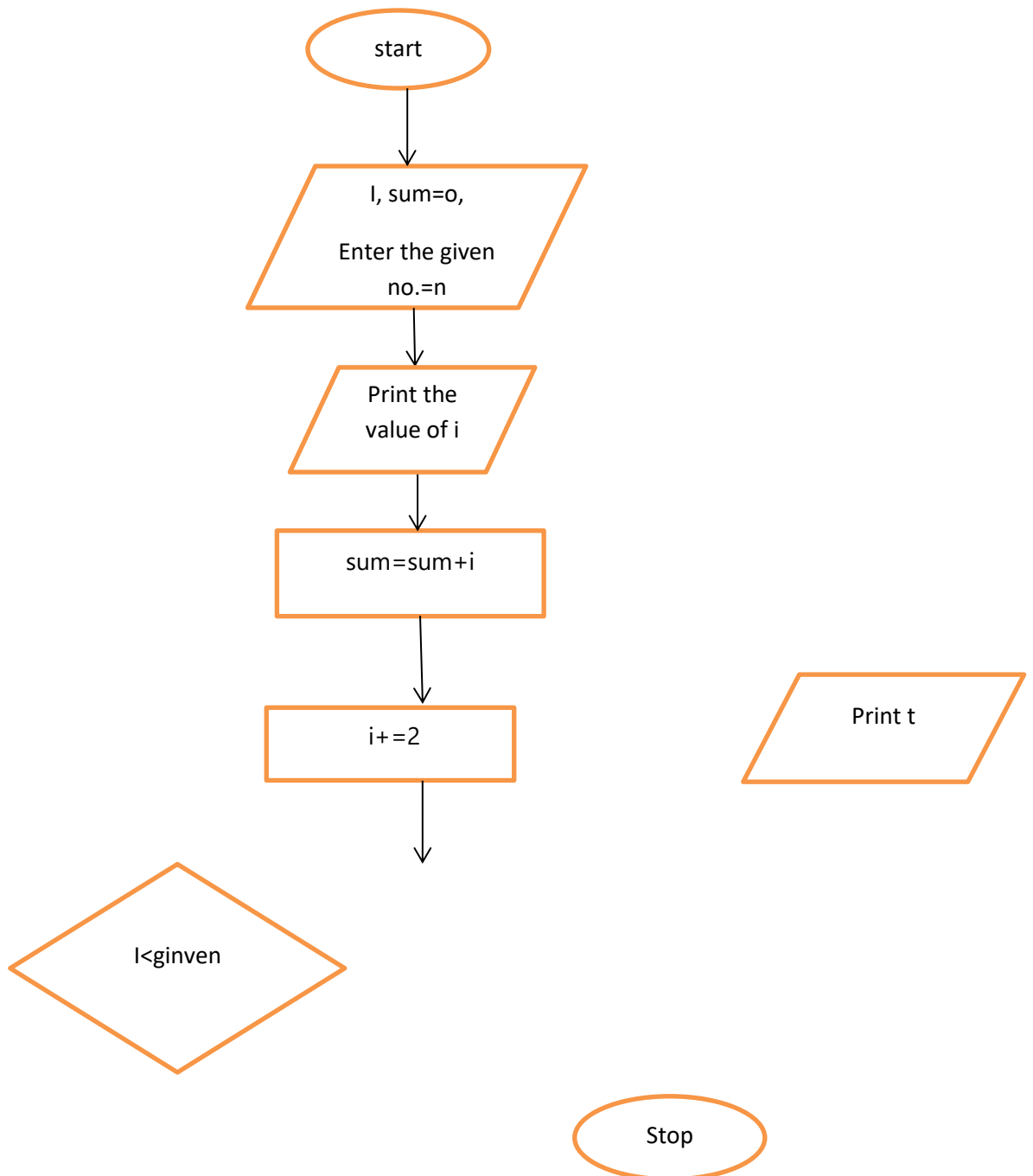Step 1-Start

Step 2- i=1,sum=0,n

Step 3-print the value of i

Step 4- sum=sum+i

Step 5-i+=2

Step 6- if (i<given number) then go to step 3

Step 7- print the sum

Step 8- End

```
            ( start )
                |
                v
      / I, sum=o,        /
     /  Enter the given /
    /   no.=n          /
                |
                v
        / Print the  /
       / value of i /
                |
                v
      [ sum=sum+i ]
                |
                v
      [ i+=2 ]                    / Print t /
                |
                v
   < I<ginven >

              ( Stop )
```

c) Calculate the average of 25 test scores.
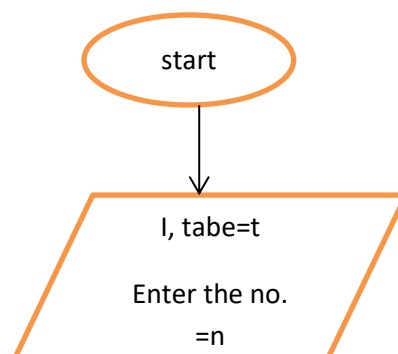Step 1-Start
Step 2-i=1, n=25, sum=0
Step 3-Input the I'th score=x
Step 4- sum=sum+x
Step 5- i=i+1
Step 7- Is (i>n?) if no, then go to step 3
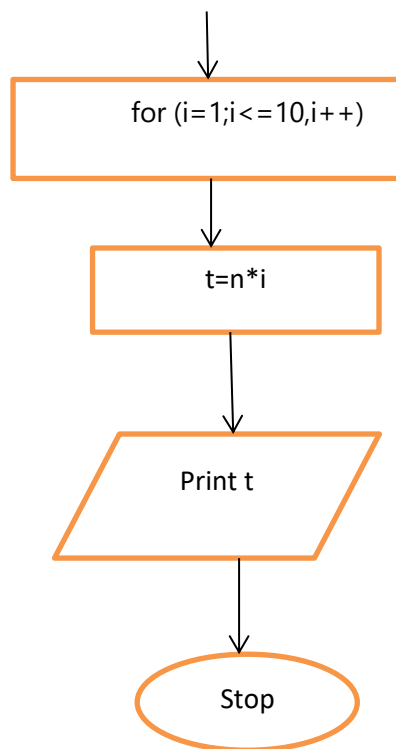Step 6- average=sum/n
Step 7- print average
Step 8- Stop

start

I, tabe=t

Enter the no.
=n

```
for (i=1;i<=10,i++)
```

```
t=n*i
```

Print t

Stop

d) Print table of any number N (say 7)
Step-1 Start
Step-2 i, enter the no.=n table=t
Step-3 for (i=1;i<=10,i++)
Step-4 t=n*i
Step-5 print t
Step-6 Stop

```
                    ┌─────────────┐
                    │    start    │
                    └─────────────┘
                           │
                           ▼
                  ╱─────────────────╲
                 ╱   I, tabe=t        ╲
                ╱                      ╲
                ╲   Enter the no.      ╱
                 ╲      =n            ╱
                  ╲─────────────────╱
                           │
                           ▼
                ┌──────────────────────┐
                │  for (i=1;i<=10,i++)  │
                └──────────────────────┘
                           │
                           ▼
                    ┌─────────────┐
                    │    t=n*i     │
                    └─────────────┘
                           │
                           ▼
                  ╱─────────────────╲
                 ╱    Print t         ╲
                 ╲─────────────────────╱
                           │
                           ▼
                    ┌─────────────┐
                    │    Stop     │
                    └─────────────┘
```
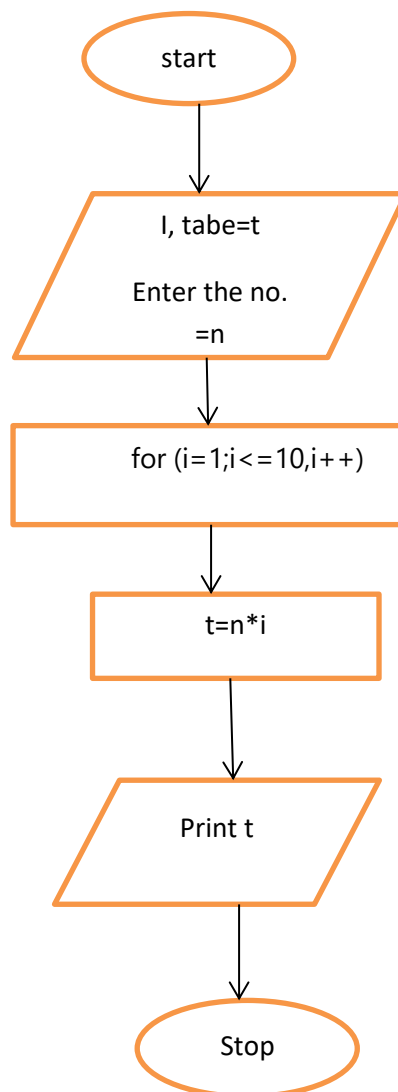
e) Check if the given number is Prime or not.

Step-1 Start
Step-2 Enter the no.=n,c=0
Step-3 for (i=1;i<=n,i++)
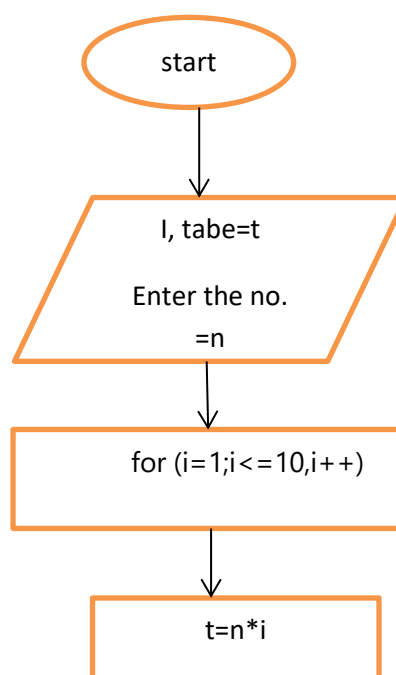Step-4 if (i%n==0)
Step-5 c++
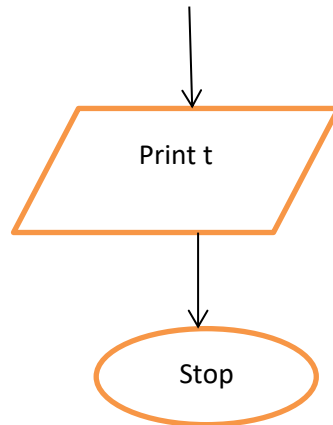Step-6 if (c==2) no then print I is not prime no.
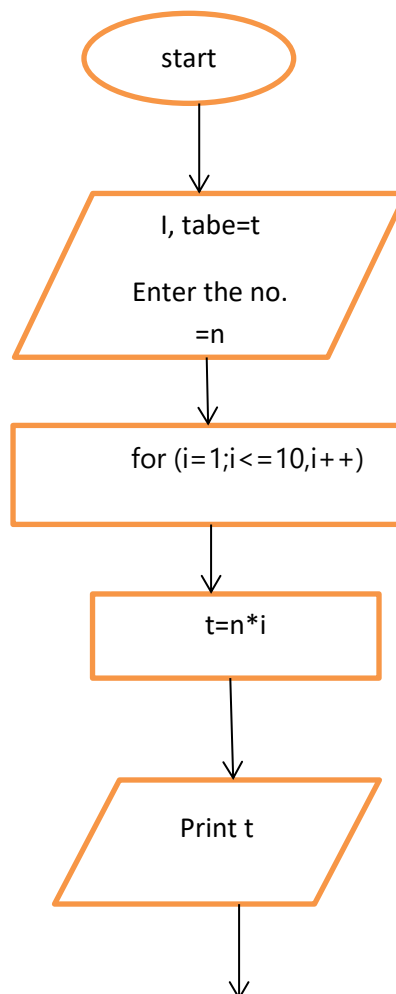Step-7 Print "i is the prime no.
Step- 8 Stop

```
        ( start )
            |
            v
     /  I, tabe=t    /
    /                /
   /  Enter the no. /
  /       =n       /
            |
            v
  [ for (i=1;i<=10,i++) ]
            |
            v
  [      t=n*i        ]
```

```
        Print t
```

```
        Stop
```

f) Print odd numbers backward from 99 to 1

Step 1-Start
Step 2- i=99, sum=0
Step 3-print the value of i
Step 4- sum=sum+i
Step 5- i-=2
Step 6- if (i>0) then go to step 3
Step – End

```
        start
```

```
   I, tabe=t

   Enter the no.
        =n
```

```
   for (i=1;i<=10,i++)
```

```
        t=n*i
```

```
        Print t
```

Stop