**1. Write the Algorithm and draw the flowcharts for the following :**  
 a) Print even numbers between 0 and 99

Step 1: Start

Step 2: Initialize i=0;

Step 3: if (i<99); // When False then go to Step 6:

Step 4: Print **(i);**

Step 5: i = i+2;

Srep 6: End / Stop

i = i + 2;

Print (**i**);

If (i<99)

Init i=2;

No

Yes

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

Step 1: Start

Step 2: Initialize i=1, count=1, sum=0;

Step 3: if (i<25); // When False then go to Step 6:

Step 4: Print **(i);**

Step 5: i = i+2; count+=1; sum +=i;

Step 6: Print **(Count);** Print **(Sum);**

Srep 7: End / Stop

i = i + 2;

Print (**i**);

If (i<25)

Init i=1;

No

Yes

Print (**Count**);

Print (**Sum**);

Print (**i**);

i = i + 2;

count+=1;

sum +=i;

**c.** Calculate the average of 25 test scores.

Step 1: Start

Step 2: Read T1,T2,T3…T25;

Step 3: Sum = (T1+T2+T3…+T25)

Read T1,T2,T3…T25;

Step 4: Avg = Sum / 25;

Step 5: Print (**Avg**);

Srep 6: End / Stop

Sum=(T1+T2+…T25);

i = i + 2;

Avg=Sum/25;

Print (**Avg**);

**d.** Print table of any number N (say 7)-

Step 1: Start

Step 2: Initialize i=1, n=7, Table=0;

Step 3: if (i<=10); // When False then go to Step 7:

Step 4: Table = i \* n;

Init i=1,n=7, Table=0;

Step 5: Print (**Table**);

Step 6: i = i + 1;

Srep 7: End / Stop

If (i<=10)

No

Yes

Table=i\*n;

i = i + 1;

Print (**Table**);

**e.** Check if the given number is Prime or not.

Step 1: Start

Step 2: Input Num;

Step 3: R=SQRT(Num)

Step 4: i=2**;**

Step 5: If(i>R) Then // Num is **Prime –** stop EndIF

Step 6: If(Num%i==0) Then //Num is **Not** **Prime –** stop EndIF

Step 7: I = I + 1

i = i + 2;

Print (**i**);

Step 7: Go to step 5

Print (**Not Prime**);

Print (**Its Prime**);

I = I + 1;

If Num%i==0;

If I > R

R=SQRT(Num)

I = 2;

Input Num

**F.** Print odd numbers backward from 99 to 1

Step 1: Start

Step 2: Initialize i=99;

Step 3: if (i>=1); // When False then go to Step 6:

Step 4: Print **(i);**

Step 5: i = i - 2;

Srep 6: End / Stop

i = i + 2;

Print (**i**);

If (i<99)

i = i - 2;

Print (**i**);

If (i>=1)

Init i=99;

No

Yes