1. Write the Algorithm and draw the flowcharts for the following:  
a) Find the average of three numbers a, b and c.  
b) Find the area of a rectangle whose length and breadth are given.

**Solution:**

1.a, **Algorithm**

Step 1: Start

Step 2: Read\input the first number as a

Step 3: Read\input the second number as b

Step 4: Read\input the third number as c

Step 5: Sum = a+b+c //Sum of a, b, c

Step 6: Avg = Sum/3 //Average of a, b, c

Step 7: Print Avg

Step 8: End

**Flowchart**

Print Avg

Avg=Sum/3

Stop

Sum=a+b+c

Read c

Read b

Read a

Start

1.b, **Algorithm**

Step 1: Start

Step 2: Read the length of the rectangle as L

Step 3: Read the breadth of the rectangle as B

Step 4: Area=L\*B

Step 5: Print Area

Step 6: End

**Flowchart**

Stop

Area=L\*B

Read B

Read L

Start

Print Area

2. Draw the flowcharts for the following:

a) Read age of a person. If age less than 60 then print “Not a senior citizen” otherwise print “Senior Citizen”.

b) Read two numbers and print maximum of 2 numbers.

c) Read three numbers and print smallest among 3 numbers.

d) Read a number in inches and convert it into meters.

e) Print 2,4,6,8,10

**Solution:**

2.a,

FALSE

TRUE

Stop

Print Senior Citizen

Print

Not a senior citizen

If age<60

Read age

Start

2.b,

FALSE

TRUE

Stop

Print B

Print A

If A>B

Read B

Read A

Start

2.c,

TRUE

FALSE

FALSE

TRUE

FALSE

TRUE

Stop

If B<C

Print A

Print C

Print B

If A<C

If A<B

Read C

Read B

Read A

Start

2.d,

M=N\*0.0254

Read N in inches

Print M

Stop

Start

2.e,

Start

Stop

Print i

for(int i=2; i<=10; i+2)