Dt : 28/7/2023

define while loop?

=>In while looping structure the condition is checked first and if the condition is true then loop-body is executed,this process is repeated until the condition is false.
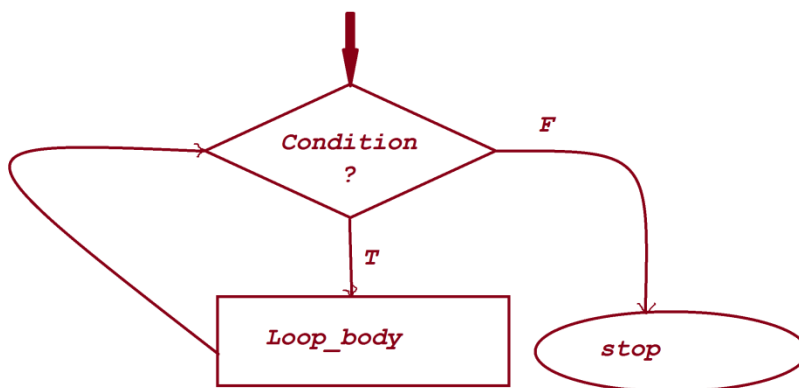
syntax:

while(condition)

{

//loop_body

}

Flowchart:

Ex:

wap to display 1 to n numbers?

Program : DemoMethods6.java

```java
import java.util.Scanner;

class DemoMethods6
{
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter the value of n(End-value):");
        int n = s.nextInt();
        if(n>0)
        {
            int i=1;
            while(i<=n)
            {
                System.out.print(i+" ");
                i++;
            }
        }
        else
```

```java
            {
                    System.out.println("Invalid input ...");
            }
    }
}
```

o/p:

Enter the value of n(End-value):

20

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

==

Assignment:(Solution)

wap to read Six sub marks of a Student and calculate "totMarks and Per"

program : StuMainClass.java

```java
import java.util.Scanner;
class Percentage
{
    float per(int totMarks)
    {
            float p = (float)totMarks/6;
            return p;
    }
}
```

```java
class StuMainClass
{
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        int i=1,totMarks=0;
        while(i<=6)
        {
            System.out.println("Enter marks of sub-"+i);
            int sub = s.nextInt();
            if(sub<0 || sub>100)
            {
                System.out.println("Invalid marks...");
                continue;
            }
            totMarks=totMarks+sub;
            i++;
        }
        System.out.println("TotalMarks:"+totMarks);
        Percentage ob = new Percentage();
        float pr = ob.per(totMarks);
        System.out.println("Percentage:"+pr);
```

```
        }
}
```

o/p:

Enter marks of sub-1

-12

Invalid marks...

Enter marks of sub-1

34

Enter marks of sub-2

160

Invalid marks...

Enter marks of sub-2

78

Enter marks of sub-3

78

Enter marks of sub-4

76

Enter marks of sub-5

77

Enter marks of sub-6

45

TotalMarks:388

Percentage:64.666664

==
========

Assignment:

Update above program by displaying result as follows:

 pr=>

   70 to 100 ===> Distiction

   60 to <70 ===> FirstClass

   50 to <60 ===> SecondClass

   35 to <50 ===> ThirdClass

      else ===> Fail

==
=========