## **Encapsulation-**

## Java Program to Get Input from User-

1.WAP to accept name, roll no, marks of 5 subject, calculate percentage and grade display. (Per, Grade)

```
import java.util.Scanner;
class encap_demo {
private int sub1,sub2,sub3,sub4,sub5,avg;
private char gr;
public int roll;
public String name;
Scanner sc=new Scanner(System.in);
public void set_per(int newval)
      avg=newval;
public int get_per() {
      return avg;
public void set_gr(char newval) {
      gr=newval;
public char get_gr() {
      return gr;
public void acc() {
      System.out.println("Enter your roll no :");
      roll=sc.nextInt();
      System.out.println("Enter your name :");
      name=sc.next();
      System.out.println("Enter student marks of English sub1 is :");
      sub1=sc.nextInt();
      System.out.println("Enter student marks of Science sub2 is :");
      sub2=sc.nextInt();
      System.out.println("Enter student marks of Computer sub3 is :");
      sub3=sc.nextInt();
      System.out.println("Enter student marks of Maths sub4 is ");
      sub4=sc.nextInt();
      System.out.println("Enter student marks of Physics sub5 is");
      sub5=sc.nextInt();
public void calc() {
      avg=(sub1+sub2+sub3+sub4+sub5)/5;
      if(avg>=90 && avg<=100) {
             gr='0';
      else if (avg>=75 && avg<90) {</pre>
             gr='A';
      }
```

```
else if (avg>=60 && avg<75) {</pre>
               gr='B';
       else if (avg>=50 && avg<60) {</pre>
               gr='C';
       else if (avg>=35 && avg<50) {</pre>
               gr='D';
}
       else {
         gr='F';
public class Encapsulation {
       public static void main(String[] args) {
               // TODO Auto-generated method stub
encap_demo obj=new encap_demo();
obj.set_per(0);
obj.set_gr('z');
obj.acc();
obj.calc();
System.out.println("Enter your name is "+obj.name);
System.out.println("Enter your roll no is "+obj.roll);
System.out.println("Enter your percentage is="+obj.get_per());
System.out.println("Enter your grade is ="+obj.get_gr());
}
OUTPUT-
 Enter your roll no :
 Enter your name :
 Apeksha
 Enter student marks of English sub1 is :
```

```
Enter your roll no :

Enter your name :

Apeksha
Enter student marks of English sub1 is :

90
Enter student marks of Science sub2 is :

85
Enter student marks of Computer sub3 is :

70
Enter student marks of Maths sub4 is

78
Enter student marks of Physics sub5 is

68
Enter your name is Apeksha
Enter your roll no is 1
Enter your percentage is=78
Enter your grade is =A
```