BASIC JAVA PROGRAMS

1. PROGRAM TO PRINT SIMPLE STATEMENTS IN JAVA

```
import java.util.*;
class program1 {
public static void main(String args[])
{
 System.out.println("Welcome to Java");
 System.out.println("Learning Java Now");
 System.out.println("Programming is fun");
 }
}
```

Output:

```
D:\Program Files\CODES>java program1
 Welcome to Java
 Learning Java Now
 Programming is fun
```

2. PROGRAM TO SHOW THE CONVERSION : METERS TO FEET

```
import java.util.*;
class program3
{
 public static void main(String args[])
 {
  float m,ft;
  Scanner sc=new Scanner(System.in);
  System.out.print("Enter the number in meters:");
  m=sc.nextFloat();   ft=m*3.28084f;
  System.out.println("Conversion of "+m+" meters into feet is: "+ft);
 }
 }
```

Output:

```
D:\Program Files\CODES>javac program3.java

D:\Program Files\CODES>java program3
 Enter the number in meters:56
 Conversion of 56.0 meters into feet is: 183.72704
```

3. Program to arrange the elements in ascending and descending order

```
import java.util.*;
class program5
{
 public static void main(String args[])
 {
  int a,b,c,temp;
  Scanner sc=new Scanner(System.in);
  System.out.print(" Enter the first integer:");
  a=sc.nextInt();
  System.out.print(" Enter the second integer:");
  b=sc.nextInt();
  System.out.print(" Enter the third integer:");
  c=sc.nextInt();
   if(a<b)
  {
   temp=a;
   a=b;
   b=temp;
    }
  if(a<c)
  {
    temp=a;
    a=c;
   c=temp;
   }
   if(b<c)
   {
   temp=b;
   b=c;
   c=temp;
   }
   System.out.print(" Descending order is as :"+a+">"+b+">"+c+"\n");
   System.out.print(" Ascending order is as :"+c+"<"+b+"<"+a);
   System.out.print("\n");
   }
 }
```

Output:

```
D:\Program Files\CODES>javac program5.java

D:\Program Files\CODES>java program5
 Enter the first integer:4
 Enter the second integer:6
 Enter the third integer:9
 Descending order is as :9>6>4
 Ascending order is as :4<6<9
```

4. Program to find the grades according to the marks entered by the user

```
import java.util.*;
class marks
{
 public static void main(String []args)
{
  float m1,m2,m3,tot,per;
  Scanner sc= new Scanner(System.in);
  System.out.println("enter the marks for java");
  m1=sc.nextFloat();
  System.out.println("enter the marks for C++");
  m2=sc.nextFloat();
 System.out.println("enter the marks for OS");
  m3=sc.nextFloat();
  tot=m1+m2+m3;
  System.out.println("your total is :"+tot);
  per=tot/3;
  if(per>=90)
  {
  System.out.println(" YOU GOT GRADE A");
  }
 else if(per>=70 )
  {
  System.out.println("YOU GOT GRADE B");
  }
 else if(per>=50 )
  {
```

```
  System.out.println("YOU GOT GRADE C");
 }
 else if(per>=35)
 {
 System.out.println("YOU GOT GRADE D");
 }
 else
 {
  System.out.println("YOU ARE FAIL");
 }
}
}
```

Output:

```
D:\Program Files\CODES>java marks
enter the marks for java
83
enter the marks for C++
97
enter the marks for OS
92
your total is :272.0
 YOU GOT GRADE A
```

5. **Program to plan a workout schedule for a week using switch case**

```
import java.util.*;
class workoutschedule
{
 public static void main(String []args)
 {
  int n;
  Scanner sc= new Scanner(System.in);
  System.out.println("let's check your workout schedule for this week");
  System.out.println("1. MONDAY");
  System.out.println("2.TUESDAY");
  System.out.println("3.WEDNESDAY");
  System.out.println("4.THURSDAY");
  System.out.println("5.FRIDAY");
  System.out.println("6.SATURDAY");
```

```
 System.out.println("7.SUNDAY");
 System.out.println("choose the day for which you want to know the
schedule");
 n=sc.nextInt();

  switch(n)
{
case 1 :
 System.out.println("its day 1 of your 1st workout week and today you need
to work on your LOWER BODY");
 break;
 case 2 :
 System.out.println("its day 2 of your 1st workout week and today you need
to work on your ABS AND CORE");
 break;
 case 3 :
 System.out.println("its day 3 of your 1st workout week and today you need
to do HIIT CARDIO");
 break;
 case 4 :
 System.out.println("REST DAY : Resting is equally important");
 break;
 case 5 :
 System.out.println("its day 4 of your 1st workout week and today you need
to work on your UPPER BODY");
 break;
 case 6 :
 System.out.println("its day 5 and today you need to do CARDIO ");
 break;
 case 7 :
 System.out.println("its day 6 of your first workout week and today you need
to work on your mobility and flexibilty (YOGA)");
 break;
 default:
 System.out.println("WRONG CHOICE");
 break;
}
}
}
```

Output:

```
D:\Program Files\CODES>java workoutschedule
lets check your workout schedule for this week
1. MONDAY
2.TUESDAY
3.WEDNESDAY
4.THURSDAY
5.FRIDAY
6.SATURDAY
7.SUNDAY
choose the day for which you want to know the schedule
3
its day 3 of your 1st workout week and today you need to do HIIT CARDIO
```

6. Program to create a Fibonacci series

```
import java.util.*;
class fib
{
 public static void main(String []args)
 {        int n,f=0,s=1,t,i;
          Scanner sc=new Scanner(System.in);
          System.out.print("enter the value :");
          n=sc.nextInt();
          System.out.println("the fibonaci series is:");
           System.out.print(" "+f+" "+s);
       for(i=2;i<n;i++)
         {   t=f+s;
           System.out.print(" "+t);
         f=s;
           s=t;}
    }
}
```

Output:

```
D:\Program Files\CODES>javac fib.java

D:\Program Files\CODES>java fib
enter the value :5
the fibonaci series is:
 0 1 1 2 3
```

7. Program to find area using function overloading

```
import java.util.*;
class areapol
{
  public static void main(String []args)
                                    {
                                     float a,b,c;
                                     int ch;
                                Scanner sc=new Scanner(System.in);
                                System.out.println("Enter the value of a:");
                                a=sc.nextFloat();
                                     System.out.println("Enter the value of b:");
                                b=sc.nextFloat();
                                     System.out.println("Enter the value of c:");
                                c=sc.nextFloat();

 System.out.println("\n 1.Circle \n 2.Rectangle \n 3.Cuboid \n Enter the choice
:");
 ch =sc.nextInt();

                                     if (ch==1)
                                     {
                                       area(a);
                                }
                               else if (ch==2)
                                     {
                                     area(a,b);
                                     }
                                     else if (ch==3)
                                     {
                                      area(a,b,c);
                                      }
                                    }

 public static void area (float a)
                                    {
                                     double ar ;
                                     ar = 3.14*a*a;
                                     System.out.println("Area of Circle is: "+ar);
```

```
                                    }

  public static void area (float a ,float b)
                                    {
                                     float ar ;
                                     ar=a*b;
                                     System.out.println("Area of Rectangle is: "+ar);
                                    }

  public static void area (float a ,float b ,float c )
                                    {
                                     double ar ;
                                     ar=2*(a*b)+2*(a*c)+2*(b*c);
                                     System.out.println("Area of Cuboid is: "+ar);
                                    }
}
```

Output :

```
D:\Program Files\CODES>java areapol
Enter the value of a:
5
Enter the value of b:
7
Enter the value of c:
4

 1.Circle
 2.Rectangle
 3.Cuboid
 Enter the choice :
3
Area of Cuboid is: 166.0
```