1] write a program to check whether a number is odd or even

```
Import java.util.scanner;
   public class oddeven {
   Public static void main (string [] args) {
      Scanner scanner = new Scanner (System.in);
System.out.print ("Enter a number : ");
   Int number = scanner.nextInt ();
if (number %.2==0) {
   System.out.println (number + " is an Even number.")
} else
{
System.out.println (number + " is an odd number ");
}
   scanner.close ();
}
}
```

output

```
Enter a number : 13
13 is a odd number.
```

2] write a java program to find maximum among two numbers.

```
Import java.util.Scanner;
        public class maximum {
Public static void main (String args[]);
{
 Scanner.scanner = new Scanner (System.in);
System.out.print ("Enter the first number :");
  Int num1 = Scanner.nextInt ();
System.out.print ("Enter the second number :");
  Int num2 = Scanner.nextInt ();
Int max = (num1 > num2) ? num1 : num2;
  System.out.println ("The maximum of " + num1 + "and"
  " + num2 + " is : " + max);
     Scanner.close ();
 }
}
```

output

```
Enter the first number = 11
Enter the second number : 24
The maximum of 11 & 24 = 24
```

3] write a java program to find factorial of a number.

```
Import.java.util.scanner;
   public class factorial {
public static void main (string args[]) {
  Scanner scanner = new scanner (system.in)
System.out.print ("Enter a number : ");
    Int number = scanner.nextint ();
long factorial = 1;
for (int i=1 ; i <= number ; i++); {
      factorial *= 1;
}
System.out.println ("Factorial of " + number + "is " +
                                        factorial);
    Scanner.close ();
  }
}
```

output:

Enter A number = 4.
factorial of 4 is = 24.

4] write a java program to display fibonicci series.

```
Import java.util.scanner.;
  public class fibonicci {
     Public static void main (string args []); {
 Scanner scanner = new Scanner (system.in);
System.out.print (" Enter a no of terms : ");
    Int n = scanner.nextInt ();
 Int first = 0; second = 1;
system.out.print ("Fibonicci series : "+First+ " "+second);
  for (int i=2 ; i<n ; i++) {
      Int next = First + second;
 System.out.print (" "+next);
    first = second;
    second = next;
}
  System.out.println ();
   scanner.close ();
}
```

output.

Enter the no. of terms : 5
Fibonicci series : 0, 1, 1, 2, 3.

6] write a program in java to check number is positive or negative.

```
Import java.util.Scanner
   public class positivenegative {
public static void main (string args []): {
  Scanner scanner = new scanner (system.in);
  System.out.Print ("Enter a number" ):
Int number = scanner.nextInt ();
  it (number >0) {
   System.out.println (number + " is a positive number ");
} else it (number <0) {
  System.out.println (number + " is a negative number ");
} else {
  system.out.println ("The number is zero ");
}
 scanner.close ();
  }
}
```

output.

```
Enter a number : 30
30 is a positive number
```

5] write a program to check whether number is palindrome or not.

```
Import java.util.Scanner ;
  Public class Palindrome{
        public static void main (String args[]) ;{
Scanner scanner =new Scanner (System.in);
 System.out.println ("Enter the number :");
Int number =Scanner.nextInt ();
Int orignalNumber =number ;
 Int reverse =0 ;
while (number. >0) {
 Int digit =number %10 ;
reverse =reverse *10 +digit
 number. /=10 ;
 }
 it (orignalNumber ==reverse) {
System. out.println (orignalNumber + " is a palindrome.");
} else {
System.out.println (OrignalNumber +"is not a palindrome");
}
 Scanner.close ();
}
}.
```

Enter a number : 121
121 is a palindrome.

10] write a java program on paramaterised constructor

```
Import java.util.*;
  class student {
    Int id ;
string name ;
student (int i , string n ) {
  id = i ;
name = n ;
}
void display () {
 system.out.println (id + "  " + name) ; }
 }
 public class main {
public static void main (string args [] ) {
student s1 = new student (11, "Aditya");
student s2 = new student (12, "Atharva");
    s1.display ();
    s2.display ();
  }
}
```

output

11 Aditya
12 Atharva

g] write a java program on default constructor

```
Import java.util.io;
 class Bike {
  Bike () { system.out.println ("Bike is created");}
  }
  public class main {
     public static void main (string args[]) {
        Bike b = new Bike ();
   }
}
```

output

Bike is created

8] write a program to Illustrate use of static block.

```
Import.java.io.*;
  class A2
  {
static {
System.out.println ("static block is Invoked");
  }
public static void main (String args [])
{
System.out.println (" Hello main");
  }
}
}
```

static block is Invoked
Hello main

4) write a java program on copy constructor

```
class student {
 Int id ;
string name ;
student (Int i & string n) :
  {
   id = s.id ;
  name = s.name;
}
Void display ()
} System. out. println (id+" "+name);
 }
public static void main (string args []);
   {
student s1 = new student (111, "om");
student s2 = new student (s1);
    s1. display ();
    s2. display ();
    }
  3
```

output

111 om

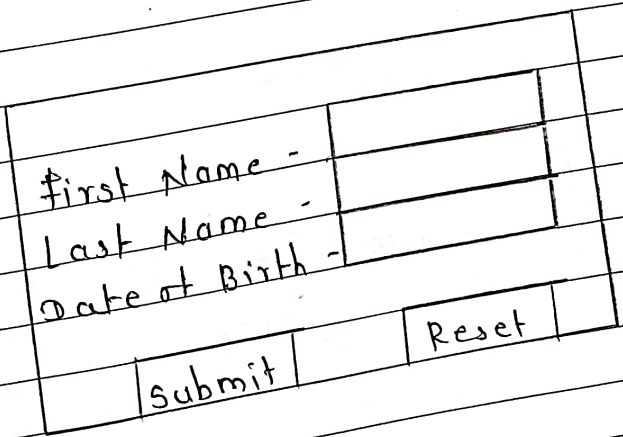
111 om

Q) write a swing program for login window.

```
import javax.swing.*;
public class SwingApp {
SwingApp () {
JFrame F = new JFrame ();
    JLabel FirstName = new JLabel ("First Name");
    First Name.setBounds : (20, 50, 80, 20);

JLabel lastName = new JLabel ("last Name");
Last Name = setBounds (20, 80, 80, 20);

JLabel dob : new JLabel ("Date of Birth");
dob : set Bounds. (20, 110, 80, 20);

JTextfield FirstNameTF = new JTextField ();
firstNameTF.setBounds (120, 80, 100, 20);

JTextfield LastNameTF = new JTextfield ();
lastNameTF . SetBounds : (120, 80, 100, 20);

JtextField dobTF = new. JText.Field ();
dob TF. SetBounds : (120, 110, 100, 20);

JButton sbmt = new JButton ("submit");
Sbmt.setBounds : (20, 160, 100, 30);

JButton reset = new JButton ("reset");
reset: set Bounds : (120, 160, 100, 30);
```

```
f.add (FirstName);
t.add (LastName);
t.add (dob);
t.add (FirstNameTF);
f.add (LastNameTF);
t.add (dob);
F.add (sbmt);
t.add (reset);
F.setSize (300,300);
F.setLayout (null);
t.setVisible (TRUE);
}
Public static void main (String [] args){
SwingApps = new SwingAPP ();
}
}
```

output



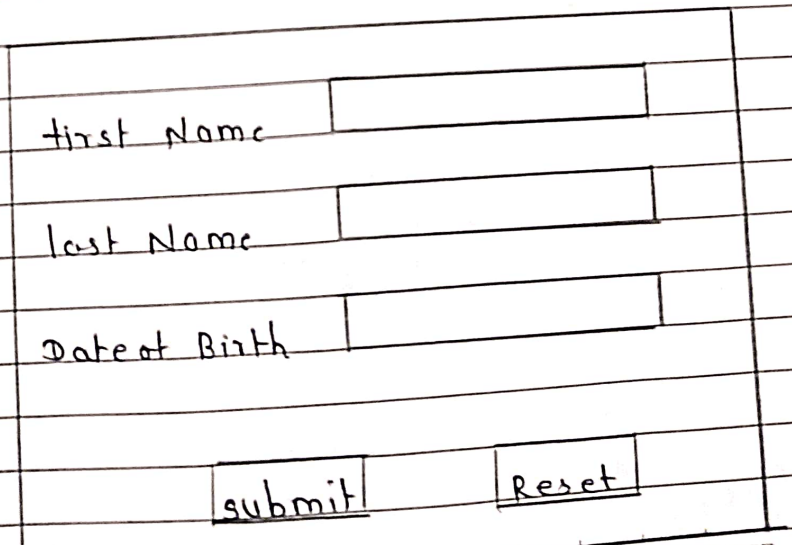
Java program to draw a smiley using Java Applet.

```
import java.applet.*;
import java.awt.*;

Public class smiley extends Applet {
Public void paint (Graphics g)
{
g.drawOval (80,70,150,150);
g.setColor (Color.Black);
g.fillOval (120,120,15,15);
g.fillOval (170,120, 15,15);

g.drawArc (130, 180, 50, 20, 180, 180);
}
};
```

Output

```
add (firstName);
add (lastName);
add (dob) ;
add (firstNameTF);
add (lastNameTF);
add (dobTF);
add (sbmt);
add (reset);
setSize (300, 300);
setLayout (null);
setVisible (true);
}
public static void main (String [] args) {
AwtApp. awt = new AwtApp ();
}
```

output -



13] write a awt program for login window.

```
Import java.awt.*;
public class AwtApp extends frame {
AwtApp () {
Label FirstName = new Label ("First Name");
firstName.setBounds (20,50,80,20);

Label lastName = new label ("Last Name");
LastName.setBounds (20,80,80,20);

label dob = new label ("Date of birth");
dob.setBounds (20,110,80,20);

textField FirstNameTF = new Textfield ();
firstNameTF.Set Bounds (120,50,100,20);

textfield lastNameTF (new Textfield ();
LastNameTF.setBounds (120,80,100,20);

textfield dobtf=(new Textfield ();
dobTF.Set Bounds (120,110,100,20);

Button sbmt = new Button ("submit");
sbmt.set bounds (20,160,100,30);

Button reset = new Button ("reset");
reset.setBounds (120,160,100,30);
```