

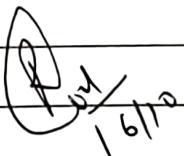
Q Write a program to display Hello world in Applet.

```
# import java.awt.*;
import java.applet.Applet;
public class HelloWorld extends Applet {
    public void paint (Graphics g) {
        g.drawString ("Hello World", 30, 40);
    }
}
```

Save this file as HelloWorld.java

```
<html>
<body>
<applet code = "HelloWorld.class" height="300" width="300">
</applet>
</body>
</html>
```

Run this file as appletviewer HelloWorld.html



Applet



Expt. No. 2

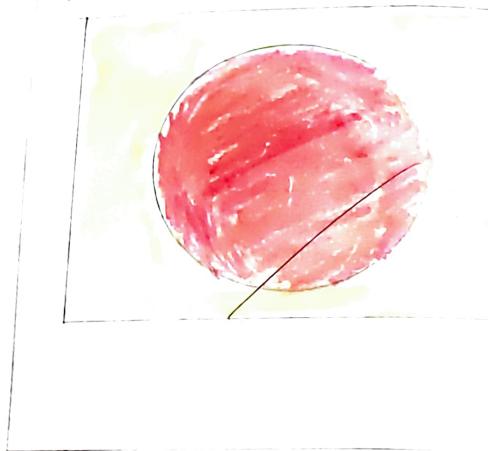
Q Write a program to display coloured smiley.

```
import java.applet.*;
import java.awt.*;
public class Smiley extends Applet {
    public void paint(Graphics g) {
        g.setColor(Color.YELLOW);
        g.fillOval(20, 40, 250, 250);
        g.setColor(Color.RED);
        g.fillOval(50, 100, 50, 70);
        g.fillOval(185, 100, 50, 70);
        g.drawLine(138, 160, 178, 210);
        g.drawArc(95, 170, 100, 180, 180, 180);
    }
}
```

Teacher's Signature _____

Output

Applet



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Expt. No. 3

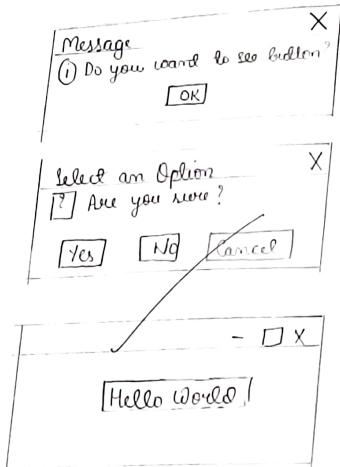
Q Write a program to design filled circle in a rectangle

```
import java.applet.Applet;  
import java.awt.*;  
public class Circle extends Applet {  
    public void paint (Graphics g)  
    {  
        g.setColor (Color.YELLOW);  
        g.fillRect (20, 40, 250, 270);  
        g.setColor (Color.RED);  
        g.fillOval (50, 100, 210, 150);  
    }  
}
```

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Teacher's Signature

Output :-



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Expt. No. 4

Q Write a program to create button and display a message using swing.

```
import java.awt.EventQueue;
```

```
public class swing {
```

```
private JFrame frame;
```

```
public static void main (String [] args) {
```

```
EventQueue.invokeLater (new Runnable () {
```

```
public void run () {
```

```
try {
```

```
swing window = new swing ();
```

```
window.frame.setVisible (true);
```

```
} catch (Exception e) {
```

```
e.printStackTrace ();
```

```
}
```

```
} public swing () { initialize (); }
```

```
private void initialize () {
```

```
frame = new JFrame ("Frame is shown");
```

```
frame.setBounds (100, 100, 450, 300);
```

```
frame.setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);
```

```
JButton btn HelloWorld = new JButton ("Hello World");
```

```
JOptionPane.showMessageDialog (frame, "Do you want to see button?");
```

```
JOptionPane.showConfirmDialog (frame, "Are you sure?");
```

```
frame.getContentPane ().add (btn HelloWorld, BorderLayout
```

```
.CENTER); }
```

```
}
```

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Teacher's Signature

Expt. No. 5.

Q Write a program to create a calculator using swing.

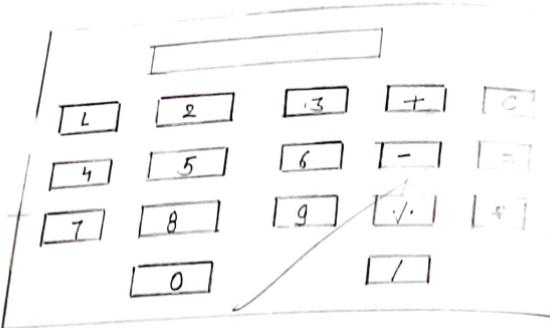
```

package Advance;
import java.awt.EventQueue;
public class Calculator {
    private JFrame frame;
    private JTextField textField;
    int a, b, c = 0;
    Swing op;

    public static void main (String [ ] args) {
        EventQueue.invokeLater (new Runnable () {
            public void run () {
                try {
                    Calculator window = new Calculator ();
                    window .frame .setVisible (true);
                } catch (Exception e) {
                    e .printStackTrace ();
                }
            }
        });
    }

    private void initialize () {
        frame = new JFrame ();
        frame .setBounds (100, 100, 450, 300);
        frame .setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);
        frame .getContentPane () .setLayout (null);
        JPanel panel = new JPanel ();
        panel .setBackground (Color.ORANGE);
        panel .setBounds (10, 5, 416, 263);
    }
}

```



Teacher's Signature _____

Expt. No. _____

```

frame.getContentPane().add(panel);
panel.setLayout(null);
JPanel panel = new JPanel();
panel.setBackground(Color.ORANGE);
panel.setBounds(10, 0, 416, 263);
frame.getContentPane().add(panel);
panel.setLayout(null);
textField = new JTextField();
textField.setFont(new Font("Tahoma", Font.PLAIN, 14));
textField.setBounds(69, 10, 212, 49);
panel.add(textField);
textField.setColumns(10);
JButton btnNewButton = new JButton("7");
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        textField.setText(textField.getText() + "7");
    }
});
btnNewButton.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton.setBounds(10, 69, 76, 37);
panel.add(btnNewButton);
JButton btnNewButton_1 = new JButton("4");
btnNewButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        textField.setText(textField.getText() + "4");
    }
});
btnNewButton_1.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_1.setBounds(10, 116, 76, 37);
panel.add(btnNewButton_1);

```

Teacher's Signature _____

```

JButton btnNewButton_2 = new JButton("L");
btnNewButton_2.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        textField.setText(textField.getText() + "L");
    }
});

btnNewButton_2.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_2.setBounds(10, 170, 76, 37);
panel.add(btnNewButton_2);

JButton btnNewButton_3 = new JButton("L");
btnNewButton_3.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_3.setBounds(96, 69, 85, 37);
panel.add(btnNewButton_3);

JButton btnNewButton_4 = new JButton("5");
btnNewButton_4.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        textField.setText(textField.getText() + "5");
    }
});

btnNewButton_4.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_4.setBounds(96, 116, 85, 37);
panel.add(btnNewButton_4);

JButton btnNewButton_5 = new JButton("E2");
btnNewButton_5.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_5.setBounds(96, 170, 85, 37);
panel.add(btnNewButton_5);

JButton btnNewButton_6 = new JButton("9");
btnNewButton_6.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_6.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
}
});

```

```

        textField.setEditable(textField.getText() + "9");
    }

    JButton btnNewButton_6 = new JButton("6");
    panel.add(btnNewButton_6);
    JButton btnNewButton_7 = new JButton("7");
    btnNewButton_7.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            textField.setEditable(textField.getText() + "6");
        }
    });
    JButton btnNewButton_8 = new JButton("8");
    btnNewButton_8.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            textField.setEditable(textField.getText() + "8");
        }
    });
    JButton btnNewButton_9 = new JButton("+");
    btnNewButton_9.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            int o = Integer.parseInt(textField.getText());
            textField.setEditable("");
            op = "add";
        }
    });
}

```

3)

});

```

btnNewButton_9.setFont(newFont("Tahoma", Font.PLAIN, 14));
btnNewButton_9.setBounds(289, 69, 52, 37);
panel.add(btnNewButton_9);
JButton btnNewButton_10 = new JButton("-");
btnNewButton_10.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        a=Integer.parseInt(textField.getText());
        textField.setText("");
        OP="Subtract";
    }
});

```

3)

});

```

btnNewButton_10.setFont(newFont("Tahoma", Font.PLAIN, 14));
btnNewButton_10.setBounds(286, 116, 55, 37);
panel.add(btnNewButton_10);
JButton btnNewButton_11 = new JButton("+");
btnNewButton_11.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        a=Integer.parseInt(textField.getText());
        textField.setText("");
        OP="Multiply";
    }
});

```

3)

});

```

btnNewButton_11.setFont(newFont("Tahoma", Font.PLAIN, 14));
btnNewButton_11.setBounds(355, 170, 61, 37);
panel.add(btnNewButton_11);
JButton btnNewButton_12 = new JButton("C");
btnNewButton_12.setFont(newFont("Tahoma", Font.PLAIN, 14));

```

```

btnNewButton_12.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        textField.setText("::");
    }
});

btnNewButton_12.setBounds(361, 69, 55, 37);
panel.add(btnNewButton_12);

JButton btnNewButton_13 = new JButton("/");
btnNewButton_13.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_13.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        a=Integer.parseInt(textField.getText());
        textField.setText("");
        op = "Divide";
    }
});

btnNewButton_13.setBounds(286, 170, 55, 37);
panel.add(btnNewButton_13);

JButton btnNewButton_14 = new JButton("=");
btnNewButton_14.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        b=Integer.parseInt(textField.getText());
        if (op == "add") {
            c=a+b;
        } else if (op == "Subtract") {
            c=a-b;
        } else if (op == "Multiply") {
            c=a*b;
        } else if (op == "Divide") {
    }
}
});

```

```

c = a / b ; } else { c = a . / . b ;
} textField. setText ( Integer. toString ( c ) );
}

btnNewButton_14. setFont ( new Font ( "Tahoma" , Font.PLAIN , 14 ) );
btnNewButton_14. setBounds ( 357 , 116 , 59 , 37 );
panel. add ( btnNewButton_14 );
JButton btnNewButton_15 = new JButton ( " / " );
btnNewButton_15. addActionListener ( new ActionListener () {
    a = Integer. parseInt ( textField. getText () );
    textField. setText ( "" );
    op = " / ";
}
);

btnNewButton_15. setBounds ( 289 , 219 , 55 , 36 );
panel. add ( btnNewButton_15 );
JButton btnNewButton_16 = new JButton ( " 0 " );
btnNewButton_16. addActionListener ( new ActionListener () {
    public void actionPerformed ( ActionEvent e ) {
        textField. setText ( textField. getText () + " 0 " );
    }
});

btnNewButton_16. setBounds ( 96 , 217 , 85 , 37 );
panel. add ( btnNewButton_16 );
}

```

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Name : Harsh

Password : ****

Gender : Male Female

AOI : JAVA PYTHON C# PHP

DOB : 26 January 1999

Address : Jaipur

Message

Name : Harsh

Password : guddan

Gender : Male

AOI : JAVA

DOB : 26 - November - 1999

Address : Jaipur

Q Write a program to create a google form and display it in message dialog box.

```
package Advance;
import java.awt.EventQueue;
public class Regis_form {
    private JFrame frame;
    private JTextField textField;
    private JTextField textField_1;
    private JTextField textField_2;
    private final ButtonGroup radioGroup = new ButtonGroup();
    private JTextField textField_3;
    public static void main (String [ ] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run () {
                try {
                    Calculator window = new Calculator ();
                    window.frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }
    public Calculator () {
        initialize();
    }
    private void initialize () {
        frame = new JFrame ();
        frame.setBounds(100, 100, 450, 300);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.getContentPane().setLayout(null);
        JPanel panel = new JPanel ();
        panel.setLayout(null);
    }
}
```

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```

panel.setBounds(0, 0, 436, 263);
frame.getContentPane().add(panel);
panel.setLayout(null);
JLabel lblNewLabel = new JLabel("Name |r|n");
lblNewLabel.setBounds(10, 10, 73, 37);
panel.add(lblNewLabel);
JLabel lblNewLabel_1 = new JLabel("Password |r|n");
lblNewLabel_1.setBounds(10, 57, 45, 13);
panel.add(lblNewLabel_1);
JTextField textField = new JTextField();
textField.setBounds(84, 19, 96, 19);
panel.add(textField);
textField.setColumns(10);
JTextField textField_1 = new JTextField();
textField_1.setBounds(84, 54, 96, 19);
panel.add(textField_1);
textField_1.setColumns(10);
JLabel lblNewLabel_2 = new JLabel("Gender |r|n");
lblNewLabel_2.setBounds(10, 93, 60, 24);
panel.add(lblNewLabel_2);
JRadioButton rdBtnNewRadioButton = new JRadioButton("Male");
buttonGroup.add(rdBtnNewRadioButton);
rdBtnNewRadioButton.setSelected(true);
rdBtnNewRadioButton.setBounds(77, 95, 103, 21);
panel.add(rdBtnNewRadioButton);
JRadioButton rdBtnNewRadioButton_1 = new JRadioButton("Female");
buttonGroup.add(rdBtnNewRadioButton_1);
rdBtnNewRadioButton_1.setBounds(206, 95, 103, 21);
panel.add(rdBtnNewRadioButton_1);

```

Teacher's Signature _____

```

JLabel lblNewLabel_3 = new JLabel("AOI");
lblNewLabel_3.setBounds(10, 127, 60, 24);
panel.add(lblNewLabel_3);

JCheckBox chkboxNewCheckBox = new JCheckBox("JAVA");
chkboxNewCheckBox.setBounds(81, 129, 68, 21);
panel.add(chkboxNewCheckBox);

JCheckBox chkboxNewCheckBox_1 = new JCheckBox("PYTHON");
chkboxNewCheckBox_1.setBounds(157, 129, 68, 21);
panel.add(chkboxNewCheckBox_1);

JCheckBox chkboxNewCheckBox_2 = new JCheckBox("C++");
chkboxNewCheckBox_2.setBounds(237, 129, 45, 21);
panel.add(chkboxNewCheckBox_2);

JCheckBox chkboxNewCheckBox_3 = new JCheckBox("PHP");
chkboxNewCheckBox_3.setBounds(302, 129, 68, 21);
panel.add(chkboxNewCheckBox_3);

JLabel lblNewLabel_4 = new JLabel("DOB");
lblNewLabel_4.setBounds(10, 161, 45, 24);
panel.add(lblNewLabel_4);

JComboBox comboBox = new JComboBox();
comboBox.setModel(new DefaultComboBoxModel(new String[] {
    "1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12", "13", "14",
    "15", "16", "17", "18", "19", "20", "21", "22", "23", "24", "25",
    "26", "27", "28", "29", "30", "31"
}));
comboBox.setBounds(84, 163, 46, 21);
panel.add(comboBox);

JComboBox comboBox_1 = new JComboBox();
comboBox_1.setModel(new DefaultComboBoxModel(new String[] {
    "January", "February", "March", "April", "May", "June", "July",
    "August", "September", "October", "November", "December"
}));

```

```

    JComboBox_1.setBounds(157, 163, 68, 21);
    panel.add(combo_Bon_1);
    JComboBox_2 = new JComboBox();
    JComboBox_2.setModel(new DefaultComboBoxModel(new String[] {
        "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005",
        "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013",
        "2014", "2015", "2016" }));
    comboBox_2.setBounds(254, 163, 68, 21);
    panel.add(comboBox_2);
    JLabel lblNewLabel_5 = new JLabel("Address \n");
    lblNewLabel_5.setBounds(10, 195, 60, 16);
    panel.add(lblNewLabel_5);
    textField_2 = new JTextField();
    textField_2.setBounds(77, 194, 232, 19);
    panel.add(textField_2);
    textField_2.setColumns(10);
    JButton btnNewButton = new JButton("Submit");
    btnNewButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            if (rbtnNewRadioButton.isSelected())
                s = "Male";
            if (rbtnNewRadioButton_1.isSelected())
                s = "Female";
            if (checkboxNewCheckBox.isSelected())
                s = s + " JAVA ";
            if (checkboxNewCheckBox_1.isSelected())
                s = s + " PYTHON ";
            if (checkboxNewCheckBox_2.isSelected())
                s = s + " C# ";
        }
    });

```

```
if (chkBoxNewCheckBox_3.isSelected())
    s = s + " PHP/T";
```

```
JOptionPane.showMessageDialog(frame, "Name : " + textField.getText()
+ " \n Password : " + textField_1.getText() + " \n Gender : " +  

+ sex + " \n AOI : " + s + " \n DD-MM-YYYY : " + comboBox_1.  

getSelectedItem() + " - " + comboBox_1.getSelectedItem() +  

" - " + comboBox_2.getSelectedItem() + " - " + comboBox_2.  

getSelectedItem() + " \n Address : " + textField_2.getText());
});
```

```
btnNewButton.setBounds(30, 221, 100, 32);
```

```
panel.add(btnNewButton);
```

```
JButton btnNewButton_1 = new JButton("Clear/(r/n)");
```

```
btnNewButton_1.addActionListener(new ActionListener() {
```

```
public void actionPerformed(ActionEvent e) {
```

```
textField.setText("");
```

```
textField_1.setText("");
```

```
textField_2.setText("");
```

```
comboBox.setSelectedIndex(0);
```

```
comboBox_1.setSelectedIndex(0);
```

```
comboBox_2.setSelectedIndex(0);
```

```
chkBoxNewCheckBox.setSelected(false);
```

```
chkBoxNewCheckBox_1.setSelected(false);
```

```
chkBoxNewCheckBox_2.setSelected(false);
```

```
chkBoxNewCheckBox_3.setSelected(false);
```

```
buttonGroup.clearSelection();
```

```
} );
```

```
btnNewButton_1.setBounds(139, 221, 97, 32);
```

```
panel.add(btnNewButton_1);
```

```
}
```

Teacher's Signature

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Expt. No. 7.

1. Write a program to implement the concept of JDBC.

```
import java.sql.*;
public class JDBC {
```

```
    public static void main (String args []) {
```

```
        try {
```

```
            Class.forName ("com.mysql.jdbc.Driver");
            Connection con = DriverManager.getConnection ("jdbc:
                mysql://localhost:3306/Harish", "root", "student");
            Statement stmt = con.createStatement ();
```

```
            ResultSet rs = stmt.executeQuery ("Select * from student");
            while (rs.next ()) {
```

```
                System.out.println (rs.getString (1) +
                    " " + rs.getString (2));
            }
```

```
            con.close ();
        }
```

```
    } catch (Exception e) {
```

```
        System.out.println (e);
    }
}
```

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Output :



Expt. No. 8.
8. Write a program to add two numbers using RMI.

- Addition interface.java :

```
import java.rmi.*;  
public interface Addition extends Remote {  
    public int add(int x, int y) throws RemoteException;
```

}

Addition.java :

```
import java.rmi.*;  
import java.rmi.server.*;  
public class Addition extends UnicastRemoteObject implements  
    AdditionInterface {  
    public Addition() throws RemoteException {  
        super();  
    }
```

```
    public int add(int x, int y) {  
        return (x+y);  
    }
```

}

- Addition Server.java :

```
import java.rmi.*;  
import java.rmi.registry.*;  
public class AdditionServer {  
    public static void main(String args[]) {  
        try {  
            AdditionInterface a = new Addition();  
            Naming.rebind("rmi://localhost:5000/hello", a);  
        } catch (Exception e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
AdditionInterface a = new Addition();  
Naming.rebind("rmi://localhost:5000/hello", a);
```

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```
catch (Exception e) {
    System.out.println(e);
```

- AdditionClient.java :

```
import java.rmi.*;
```

```
public class AdditionClient {
```

```
    public static void main (String args []) {
```

```
        try {
```

```
            Additioninterface a = (Additioninterface)
```

```
            Naming.lookup ("rmi://localhost:5000/hello");
```

```
            System.out.println (a.add (34,4));
```

```
        } catch (Exception e) {
```

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Output:

Registration Form	Submit
Gender : Male	Female
Address :	123 Main Street, New York, NY 10001
Preferences :	C++ JAVA
Address :	PHP
Submit	
User Details	
<input type="button" value="Clear"/>	
Enter data in database	
username :	Rohit
Password :	0203
Gender :	Male
DOB :	26 November 1995
Address :	Jaipur
<input type="button" value="Yes"/>	<input type="button" value="No"/>

Expt. No. 9

Write a program to connect the registration form with database using the concept of JDBC.

```

import java.awt.EventQueue;
import java.sql.*;
public class Form extends JFrame {
    JPanel contentPane;
    JTextField userf;
    JPasswordField passwdf;
    JButton buttonGroup;
    JTable table;
}

```

```

public static void main (String args[]) {
    EventQueue.invokeLater (new Runnable () {
        public void run () {
            try {

```

```

                Form frame = new Form ();
                frame.setVisible (true);
            } catch (Exception e) {
                e.printStackTrace ();
            }
        }
    });
}

```

```
public Form () {
```

```

    setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);
    setBounds (100, 100, 519, 567);
    contentPanel = new JPanel ();
}
```

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Expt No.

contentPane.setBorders(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
contentPane.setLayout(null);

Label lblUsername = new JLabel("Username: ");
lblUsername.setBounds(12, 84, 94, 16);
contentPane.add(lblUsername);

Label lblPassword = new JLabel("Password: ");
lblPassword.setBounds(12, 128, 93, 16);
contentPane.add(lblPassword);

Label lblGender = new JLabel("Gender: ");
lblGender.setBounds(12, 165, 93, 16);
contentPane.add(lblGender);

Label lblPreferences = new JLabel("Preferences: ");
lblPreferences.setBounds(12, 215, 94, 16);
contentPane.add(lblPreferences);

Label lblDOB = new JLabel("D.O.B: ");
lblDOB.setBounds(12, 255, 93, 16);
contentPane.add(lblDOB);

Label lblNewlabel = new JLabel("Address: ");
lblNewlabel.setBounds(12, 295, 93, 16);
contentPane.add(lblNewlabel);

Label lblRegistrationform = new JLabel("Registration Form");

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lblRegistrationForm.setHorizontalAlignment(SwingConstants.CENTER);
 lblRegistrationForm.setFont(new Font("Tahoma", Font.PLAIN, 18));
 lblRegistrationForm.setBounds(101, 11, 228, 28);
 contentPane.add(lblRegistrationForm);

userf = new JTextField();
 userf.setBounds(107, 81, 297, 22);
 contentPane.add(userf);
 userf.setColumns(10);

passwordField = new JPasswordField();
 passwordField.setBounds(107, 120, 297, 20);
 contentPane.add(passwordField);

JRadioButton rdBtnMale = new JRadioButton("Male");
 buttonGroup.add(rdBtnMale);
 rdBtnMale.setBounds(103, 161, 71, 29);
 contentPane.add(rdBtnMale);

JRadioButton rdBtnFemale = new JRadioButton("Female");
 buttonGroup.add(rdBtnFemale);
 rdBtnFemale.setBounds(176, 161, 83, 25);
 contentPane.add(rdBtnFemale);

JComboBox Day = new JComboBox();
 Day.setModel(new DefaultComboBoxModel(new String[] {
 "1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12", "13", "14",
 "15", "16", "17", "18", "19", "20", "21", "22", "23", "24", "25", "26",
 "27", "28", "29", "30", "31"}));

Day.setBounds(107, 204, 41, 22);
 contentPane.add(Day);

JComboBox Month = new JComboBox();
 Month.setModel(new DefaultComboBoxModel(new String[] {
 "January", "February", "March", "April", "May", "June", "July",
 "August", "September", "October", "November", "December" }));
 Month.setBounds(182, 204, 127, 22);
 contentPane.add(Month);

JComboBox Year = new JComboBox();
 Year.setModel(new DefaultComboBoxModel(new String[] {
 "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002",
 "2003", "2004", "2005" }));
 Year.setBounds(333, 204, 71, 22);
 contentPane.add(Year);

JCheckBox chcbxC = JCheckBox("C");
 chcbxC.setBounds(114, 241, 56, 25);
 contentPane.add(chcbxC);

JCheckBox chcbxC++ = JCheckBox("C++");
 chcbxC++.setBounds(267, 241, 63, 25);
 contentPane.add(chcbxC++);

JCheckBox chcbx_2 = JCheckBox("PH JAVA");
 chcbx_2.setBounds(167, 241, 63, 25);
 contentPane.add(chcbx_2);
 JCheckBox chcbx_3 = JCheckBox("PHP");

```
checkbox_2.setBounds(317, 241, 56, 25);
contentPane.add(checkbox_2);
```

```
JTextArea textArea = new JTextArea();
textArea.setBounds(114, 282, 280, 71);
contentPane.add(textArea);
table = new JTable();
table.setBorders(new EmptyBorder(4, 4, 4, 4));
DefaultTableModel model = new DefaultTableModel(
    new Object[1][]
    {
        new String[]
        {
            "Name", "Gender", "DOB", "Preferences", "Address"
        }
    }
);
table.setModel(model);
table.setBounds(41, 421, 415, 89);
contentPane.add(table);
```

```
JButton btnSubmit = new JButton("Submit");
btnSubmit.addActionListener(new ActionListener()
{
    public void actionPerformed(ActionEvent arg0)
    {
        String message = "";
        String username = userFld.getText();
        message += "Username: " + username + "\n";
        String password = passwordFld.getText();
        message += "Password: " + password + "\n";
        String gender;
```

```

if (!rdbtnMale.isSelected() && !rdtnFemale.isSelected())
{
    JOptionPane.showMessageDialog(null, "Please select gender");
    return;
}
else
{
    if (rdtnMale.isSelected())
        gender = "Male";
    else
        gender = "Female";
}

Message += "Gender: " + gender + "\n";
String DOB = Day.getSelectedItem() + "-" + Month.getSelectedItem()
            + "-" + Year.getSelectedItem();

Message += "DOB: " + DOB + "\n";
String Preferences = "";
if (chkbox1.isSelected())
    preferences += "C";
if (chkbox1_1.isSelected())
    preferences += "C++";
if (chkbox1_1_1.isSelected())
    preferences += "JAVA";
if (chkbox2.isSelected())
    preferences += "Python"; // PHP;
Message += "Preferences: " + preferences + "\n";
String address = textArea.getText();
Message += "Address: " + address + "\n";

int choice = JOptionPane.showConfirmDialog(null,
    message, "Enter data in database", "JOptionPane.YES_NO_OPTION");

```

```
if (choice == JOptionPane.NO_OPTION)
```

```
{ return;
```

```
else {
```

```
try {
```

```
Class.forName("com.mysql.jdbc.Driver");
```

```
Connection connection = (Connection) DriverManager.getConnection("jdbc:mysql://localhost:3306/data", "root", "student");
```

```
Statement stmt = connection.createStatement();
```

```
String query = "insert into student values
```

```
("'" + username + "','" + password + "','" + gender + "',  
'"DOB. "' ,'" + preferences + "','" + address + "')";
```

```
stmt.executeUpdate(query);
```

```
} catch (SQLException | ClassNotFoundException
```

```
sqlException) {
```

```
sqlException.printStackTrace();
```

```
} JOptionPane.showMessageDialog(null, "Data Entered");
```

```
}
```

```
btnSubmit.setBounds(31, 174, 113, 36);
```

```
contentPane.add(btnSubmit);
```

```
JButton btnClear = new JButton("Clear");
```

```
btnClear.addActionListener(new ActionListener() {
```

```
public void actionPerformed(ActionEvent arg0) {
```

```
wtf.setText("");
```

```
passwordField.setText("");
```

```

buttonGroup.clearSelection();
Day.setSelectedIndex(0);
Month.setSelectedIndex(0);
Year.setSelectedIndex(0);
checkbox.setSelected(false);
checkbox_L.setSelected(false);
checkbox_L.setSelected(false);
checkbox_2.setSelected(false);
textArea.setText(" ");
model.setRowCount(0);

};

btnClear.setBounds(375, 374, 118, 36);
contentPane.add(btnClear);

```

```

JButton btnShowStudents = new JButton("Show Students");
btnShowStudent.addActionListener(ActionListener());
public void actionPerformed(ActionEvent args) {
    String name = "";
    String gender = "";
    String dob = "";
    String preferences = "";
    String address = "";
    try {
        Class.forName("com.mysql.jdbc.driver");
        Connection connection = (Connection) DriverManager.getConnection
            ("jdbc:mysql://localhost:3306/data", "root", "student");
        Statement stmt = connection.createStatement();
        String query = "select * from student";
    }

```

```
ResultSet rs = stmt.executeQuery(query);
while(rs.next()) {
    name = rs.getString("username");
    gender = rs.getString("gender");
    dob = rs.getString("DOB");
    preferences = rs.getString("preferences");
    address = rs.getString("address");
    model.addresses(new Object[] {name, gender, dob,
        preferences, address});
}
```

```
catch(SQLException | ClassNotFoundException) {
    SqlException.printStackTrace();
}
```

```
SqlException.printStackTrace();
```

```
btnShowStudents.setBounds(182, 374, 147, 36);
```

```
contentPane.add(btnShowStudents);
```

```
}
```

1
✓
11112

Expt. No. 10.

Write a JSP program to display current time and date.

```
<%@ page import="java.io.* , java.util.* , javax.servlet.* "%>
<html>
<head>
<title>Display current date and time </title>
</head>
<body>
<center>
<h1> Display current date and time </h1>
</center>
</body>
</html>
Date date = new Date();
out.print("<h2 align = "center">" + date.toString()
+ "</h2>");
</>
</body>
</html>
```

Teacher's Signature _____

Write a servlet application to design a simple interest calculation.

Creating a Simple Servlet

(1) `<html>`

`<body>`

```
<!. out.print("<h1>My Simple Interest Calculator </h1>"); </>
<form id = Fr-interest name = Fr-interest method = get action =
"Simple Interest">
```

A: `<input type = text value = " " name = p>
`

B: `<input type = text value = " " name = r>
`

C: `<input type = text value = " " name = t>
`

`<input type = submit name = Sb value = "Calculate">`

`</form>`

`</body>`

`</html>`

- (ii) Interest class which implements a business logic for calculating interest.

```
package mypkg;
public class Interest {
    public int calc_interest (int a1, int a2, int a3)
    { int res = (a1 * a2 * a3) / 100;
        return res;
    }
}
```

- (iii) Simple interest implementation for the doGet method for the servlet.

```
package mypkg;
```

```

import java.io.IOException;
@.WebServlet("/Simple Interest");
public class SimpleInterest extends HttpServlet {
    private static final long serialVersionUID = 1L;
    private SimpleInterest() {
        super();
    }
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
        String p = request.getParameter("p");
        int p = Integer.parseInt(p);
        String q = request.getParameter("q");
        int q = Integer.parseInt(q);
        String t = request.getParameter("t");
        int t = Integer.parseInt(t);
        Interest myobj = new Interest();
        int result = myobj.calc_interest(p, q, t);
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.print("<h1> Interest Result </h1>");
        out.print("The result is : <br>" + result + "</br>");
    }
}

```

```

protected void doPost(HttpServletRequest request,
    HttpServletResponse response) throws ServletException,
    IOException {
}

```

// TODO Auto-generated method stub

10/8/12

Output :-

My simple interest calculator

A :

1000
5
2

~~Interest Result~~

The result is: 100