

AYUSH BHARDWAJ

AD-1226

BSC HONS

COMPUTER SCIENCE

JAVA

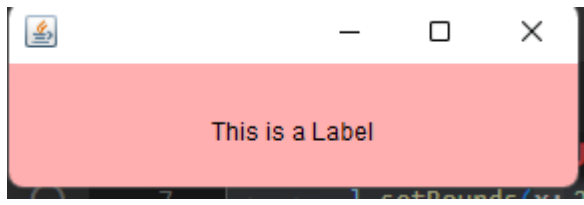
LAB - 09

Q1. Using AWT, write a program to display a string in frame window with pink colour as background.

Code:-

```
import java.awt.*;
import java.awt.event.*;
public class PinkFrame extends Frame {
    Label l;
    PinkFrame() {
        l = new Label("This is a Label");
        l.setBounds(25, 50, 250, 30);
        l.setAlignment(Label.CENTER);
        this.setBackground(Color.PINK);
        this.add(l);
        this.setSize(300, 100);
        this.setLayout(null);
        this.setVisible(true);
        this.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent e) {
                dispose();
            }
        });
    }
    public static void main(String[] args) {
        new PinkFrame();
    }
}
```

Output:-



Q2. Using AWT, write a program to create two buttons named “Red” and “Blue”. When a button is pressed the background color should be set to the color named by the button’s label.

Code:-

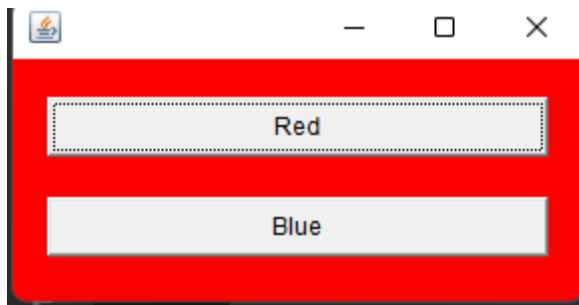
```
import java.awt.*;
import java.awt.event.*;
public class ButtonDemo extends Frame implements ActionListener {
    Button btnRed, btnBlue;
    ButtonDemo() {
        btnRed = new Button("Red");
        btnRed.setBounds(25, 50, 250, 30);
        btnRed.addActionListener(this);
        this.add(btnRed);
        btnBlue = new Button("Blue");
        btnBlue.setBounds(25, 100, 250, 30);
        btnBlue.addActionListener(this);
        this.add(btnBlue);
        this.setSize(300, 160);
        this.setLayout(null);
        this.setVisible(true);
        this.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent e) {
                dispose();
            }
        });
    }
    public static void main(String[] args) {
        new ButtonDemo();
    }
    public void actionPerformed(ActionEvent e) {
        if (e.getSource() == btnRed) {
            this.setBackground(Color.RED);
        }
    }
}
```

```

        else if (e.getSource() == btnBlue) {
            this.setBackground(Color.BLUE);
        }
    }
}

```

Output:-



Ques 3 : Using AWT, write a program which responds to KEY_TYPED event and updates the status window with message (“Typed character is: X”). Use adapter class for other two events.

Code :-

```

import java.awt.*;
import javax.swing.*;
import java.awt.event.*;

class KbdAdapter extends KeyAdapter {
    Label l;
    KbdAdapter(Label l) {
        this.l = l;
    }
    public void keyTyped(KeyEvent e) {
        l.setText("Typed character is: " + e.getKeyChar());
    }

    public void keyPressed(KeyEvent e) {
        System.out.println("Pressed character is: " + e.getKeyChar());
    }

    public void keyReleased(KeyEvent e) {

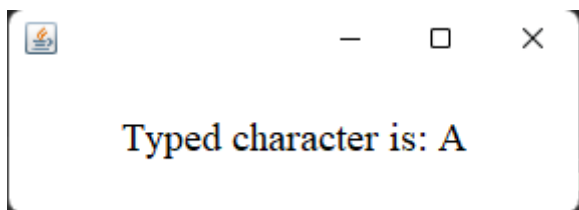
```

```

        System.out.println("Released character is: " + e.getKeyChar());
    }
}
public class Key extends Frame {
    Label l;
    Key() {
        Font myFont1 = new Font("Serif", Font.PLAIN, 20);
        l = new Label("Start");
        l.setBounds(25, 50, 250, 30);
        l.setFont(myFont1);
        l.setAlignment(Label.CENTER);
        this.addKeyListener(new KbdAdapter(l));
        this.add(l);
        this.setSize(300, 110);
        this.setLayout(null);
        this.setVisible(true);
        this.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent e) {
                dispose();
            }
        });
    }
    public static void main(String[] args) {
        new Key();
    }
}

```

Output :-



Ques 4 : Using AWT, write a program to create two buttons labelled 'A' and 'B'. When button 'A' is pressed, it displays your personal information (Name, Course, Roll No, College) and when button 'B' is pressed, it displays your CGPA in previous semester.

Code :-

```
import java.awt.*;
import java.awt.event.*;
public class Info extends Frame implements ActionListener {
    Button btnInfo, btnCGPA;
    Info() {
        super("Student Details");

        // Button A
        btnInfo = new Button("A");
        btnInfo.setBounds(25, 125, 450, 100);
        btnInfo.addActionListener(this);
        this.add(btnInfo);

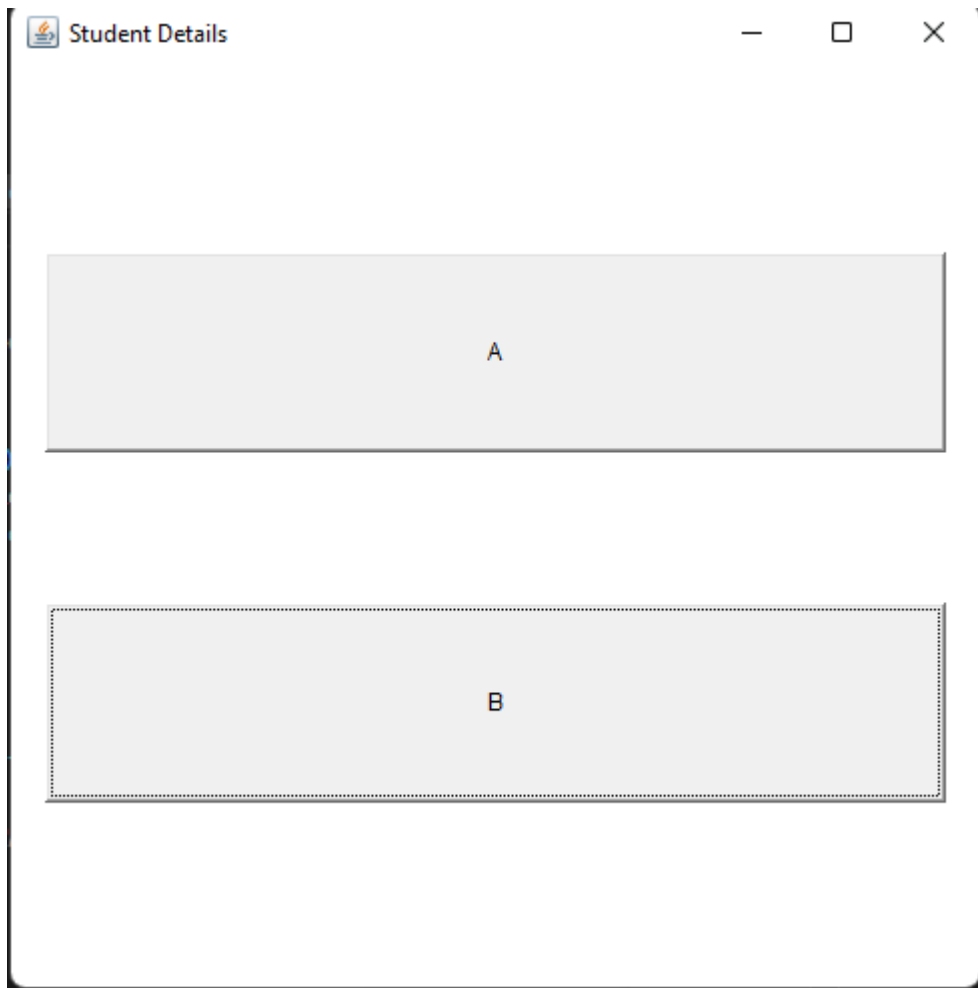
        // Button B
        btnCGPA = new Button("B");
        btnCGPA.setBounds(25, 300, 450, 100);
        btnCGPA.addActionListener(this);
        this.add(btnCGPA);


        this.setSize(500, 500);
        this.setLayout(null);
        this.setVisible(true);
        this.setLocationRelativeTo(null);
        this.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent e) {
                dispose();
            }
        });
    }

    public void actionPerformed(ActionEvent e) {
        if(e.getSource() == btnInfo) {
            new PersonalInfo("Ayush BHARDWAJ", "BSc(Hons) Computer
Science", "AD-1226", "ANDC College");
        }else{
            new CGPA("9.5");
        }
    }
}
```

```
public static void main(String[] args) {  
    new Info();  
}
```

OUTPUT:-




 Personal Information — □ ×

Name:

Course:

Roll No.:

College:

 Previous Year CGPA — □ ×

Your CGPA was: 9.5