

Q1.)

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

class Window extends JFrame{
    Window() {
        setSize(300,300);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setTitle("My First Frame");
        setLocationRelativeTo(null);
        setVisible(true);
    }
}

class Example{
    public static void main(String args[]){
        Window w1 = new Window();

    }
}
```

Q2.)

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

class Window extends JFrame{
    JButton buttonNorth,buttonSouth,buttonWest,buttonEast,buttonCenter;
    Window() {
        setSize(300,300);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setTitle("Border Layout Window");
        setLocationRelativeTo(null);

        buttonNorth = new JButton();
        buttonNorth.setText("North");
        buttonNorth.setFont(new Font("",1,20));
        add("North",buttonNorth);

        buttonSouth = new JButton();
        buttonSouth.setText("South");
    }
}
```

```

        buttonSouth.setFont(new Font("", 1, 20));
        add("South", buttonSouth);

        buttonWest = new JButton();
        buttonWest.setText("West");
        buttonWest.setFont(new Font("", 1, 20));
        add("West", buttonWest);

        buttonEast = new JButton();
        buttonEast.setText("East");
        buttonEast.setFont(new Font("", 1, 20));
        add("East", buttonEast);

        buttonCenter = new JButton();
        buttonCenter.setText("Center");
        buttonCenter.setFont(new Font("", 1, 20));
        add("Center", buttonCenter);

        setVisible(true);
    }
}

class Example{
    public static void main(String args[]){
        Window w1 = new Window();

    }
}

```

Q3.)

```

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

class Window extends JFrame{
    JLabel label1 , label2;

    Window(){
        setSize(400,200);
        setLocationRelativeTo(null);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
    }
}

```

```

        setTitle("Border Layout Window");

        label1 = new JLabel();
        label1.setText("This is North Border");
        label1.setFont(new Font("", 4, 20));
        add("North", label1);

        label2 = new JLabel();
        label2.setText("This is South Border");
        label2.setFont(new Font("", 4, 20));
        add("South", label2);

        label1.setHorizontalAlignment(JLabel.CENTER);
        label2.setHorizontalAlignment(JLabel.CENTER);

        setVisible(true);
    }
}

public class Example{
    public static void main(String args[]){
        Window frame1 = new Window();

    }
}

```

Q4.)

```

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

class Window extends JFrame{
    JLabel label1 , label2;

    Window(){
        setSize(400,200);
        setLocationRelativeTo(null);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setTitle("Border Layout Window");
    }
}

```

```

        label1 = new JLabel();
        label1.setText("This is North Border");
        label1.setFont(new Font("", 1, 30));
        add("North", label1);

        label2 = new JLabel();
        label2.setText("This is South Border");
        label2.setFont(new Font("", 1, 30));
        add("South", label2);

        label1.setHorizontalAlignment(JLabel.CENTER);
        label2.setHorizontalAlignment(JLabel.CENTER);

        setVisible(true);
    }
}

public class Example{
    public static void main(String args[]){
        Window frame1 = new Window();

    }
}

```

Q5.)

```

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

class Window extends JFrame{
    JButton button1, button2, button3, button4;

    Window(){
        setSize(500, 400);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Flow Layout Window");
        setLayout(new FlowLayout());

        button1 = new JButton();
    }
}

```

```

        button1.setText("Button 1");
        button1.setFont(new Font("", 4, 20));
        add(button1);

        button2 = new JButton();
        button2.setText("This is a Button");
        button2.setFont(new Font("", 4, 20));
        add(button2);

        button3 = new JButton();
        button3.setText("Button 2");
        button3.setFont(new Font("", 4, 20));
        add(button3);

        button4 = new JButton();
        button4.setText("Execute");
        button4.setFont(new Font("", 4, 20));
        add(button4);

        setVisible(true);

    }
}
class Example{
    public static void main(String args[]){
        Window W1 = new Window();

    }
}

```

Q6.)

```

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

class Window extends JFrame{
    JButton button1,button2,button3,button4;

    Window(){
        setSize(500,400);
    }
}

```

```

        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Flow Layout Window");

        setLayout(new FlowLayout(FlowLayout.LEFT));

        button1 = new JButton();
        button1.setText("Button 1");
        button1.setFont(new Font("", 4, 20));
        add(button1);

        button2 = new JButton();
        button2.setText("This is a Button");
        button2.setFont(new Font("", 4, 20));
        add(button2);

        button3 = new JButton();
        button3.setText("Button 2");
        button3.setFont(new Font("", 4, 20));
        add(button3);

        button4 = new JButton();
        button4.setText("Execute");
        button4.setFont(new Font("", 4, 20));
        add(button4);

        setVisible(true);

    }
}

class Example{
    public static void main(String args[]){
        Window W1 = new Window();

    }
}

```

Q7.)

```
import javax.swing.*;
```

```
import java.awt.*;

class Window extends JFrame{
    JButton button1,button2,button3,button4;

    Window(){
        setSize(500,400);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Flow Layout Window");

        setLayout(new FlowLayout(FlowLayout.RIGHT));

        button1 = new JButton();
        button1.setText("Button 1");
        button1.setFont(new Font("",4,20));
        add(button1);

        button2 = new JButton();
        button2.setText("This is a Button");
        button2.setFont(new Font("",4,20));
        add(button2);

        button3 = new JButton();
        button3.setText("Button 2");
        button3.setFont(new Font("",4,20));
        add(button3);

        button4 = new JButton();
        button4.setText("Execute");
        button4.setFont(new Font("",4,20));
        add(button4);

        setVisible(true);

    }
}

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

```
Window W1 = new Window();

}

}
```

Q8.)

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

class Window extends JFrame{
    JButton button1,button2,button3,button4;

    Window(){
        setSize(500,400);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Grid Layout Window");

        setLayout(new GridLayout(2,2));

        button1 = new JButton();
        button1.setText("Button 1");
        button1.setFont(new Font("",4,20));
        add(button1);

        button2 = new JButton();
        button2.setText("Button 2");
        button2.setFont(new Font("",4,20));
        add(button2);

        button3 = new JButton();
        button3.setText("Button 3");
        button3.setFont(new Font("",4,20));
        add(button3);

        button4 = new JButton();
        button4.setText("Button 4");
        button4.setFont(new Font("",4,20));
        add(button4);
    }
}
```



```

        setVisible(true);

    }
}
class Example{
    public static void main(String args[]){
        Window W1 = new Window();

    }
}

```

Q9.)

```

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

class Calculator extends JFrame{

    JButton[] buttons = new JButton[16];

    Calculator(){
        setSize(250, 250);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Calculator");
        setLayout(new FlowLayout());
        Font font = new Font("", 1, 30);

        String[] names = {"7", "8", "9", "*", "4", "5", "6", "/", "1", "2",
"3", "+", "0", ".", "=", "-"};

        for(int i = 0; i < buttons.length; i++){
            buttons[i] = new JButton(names[i]);
            buttons[i].setFont(font);
            add(buttons[i]);
        }

        setVisible(true);
    }
}

```

```

}

class Example{
    public static void main(String[] args) {
        Calculator c1 = new Calculator();
    }
}

```

Q10.)

This Programme hasn't a output . because of main method is in the template . and also JPanel doesn't have a setVisible Method.and you have to add JFrame to JPanel.

Q11.)

```

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

class Frame extends JFrame{
    JButton
buttonNorth,buttonSouth,buttonEast,buttonWest,button1,button2,button3,butt
on4;
    JPanel panel;

    Frame () {
        setSize(400,300);
        setLocationRelativeTo(null);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setTitle("JPanel is a container");
        setLayout(new BorderLayout());

        buttonNorth = new JButton("North");
        buttonNorth.setFont(new Font("",2,30));
        add("North",buttonNorth);

        buttonSouth = new JButton("South");
        buttonSouth.setFont(new Font("",2,30));
        add("South",buttonSouth);

        buttonEast = new JButton("East");
        buttonEast.setFont(new Font("",2,30));
        add("East",buttonEast);
    }
}

```

```

        buttonWest = new JButton("West");
        buttonWest.setFont(new Font("", 2, 30));
        add("West", buttonWest);

        panel = new JPanel();
        panel.setLayout(new GridLayout(2, 2));

        button1 = new JButton("Button 1");
        button1.setFont(new Font("", 2, 15));
        panel.add(button1);

        button2 = new JButton("Button 2");
        button2.setFont(new Font("", 2, 15));
        panel.add(button2);

        button3 = new JButton("Button 3");
        button3.setFont(new Font("", 2, 15));
        panel.add(button3);

        button4 = new JButton("Button 4");
        button4.setFont(new Font("", 2, 15));
        panel.add(button4);

        add("Center", panel);

        setVisible(true);
    }
}

class Example{
    public static void main(String args[]){
        new Frame();
    }
}

```

Q12.)

Programs default layout is flow layout. create a JPanel named buttonPanel add 3 new JButton add there center of window.

Q13.)

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

class Cal extends JFrame{
    JButton[] button = new JButton[16];
    Cal(){
        setSize(400,300);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setTitle("Calculator");
        setLayout(new BorderLayout());

        Font font = new Font("",2,15);
        JTextField textField = new JTextField();

        textField.setFont(font);
        add("North",textField);

        JPanel centerPanel = new JPanel(new GridLayout(4,4));
        String[] digit =
{"7","8","9","*","4","5","6","/","1","2","3","+","0",".", "=", "-"};

        for (int i = 0; i <button.length;i++ ){

            button[i] = new JButton();
            button[i].setText(digit[i]);
            button[i].setFont(font);
            centerPanel.add(button[i]);
        }
        add("Center",centerPanel);

        setVisible(true);
    }
}

class mine{
    public static void main(String[] args) {
        new Cal();
    }
}
```

Q14.)

In this exercise use flow layout. first num1textField add to enter a first number and num2textField to enter a second number. the plus(+) operator Label added between of above textField. after above three label and textFields added equal button. after equal button there have one space label

Q15.)

In this exercise open a 200 * 100 window and it is name by Demonstrate JLabel. in the top Left corner of the window has a label name by "This is a JLabel" .

Q16.)

In this exercise open a window name by "Demonstrate JLabel". in the middle of the top of window has a label name by "This a JLabel" with italic font.

??
 ???
 ???

Q17.)

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

class Form extends JFrame {
    JLabel titleLabel, label1, label2, label3, label4;
    JTextField textField1, textField2, textField3, textField4;
    JButton button1, button2;

    Form() {
        setSize(400, 200);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Student Detail Form");
        setLayout(new BorderLayout());

        titleLabel = new JLabel("Student Detail Form");
        Font font = new Font("", 1, 18);
        titleLabel.setFont(font);
        titleLabel.setHorizontalAlignment(JLabel.CENTER);
        add("North", titleLabel);

        JPanel centerPanel = new JPanel(new FlowLayout(FlowLayout.RIGHT));
        Font font1 = new Font("", 1, 15);

        label1 = new JLabel("Student id");
```

```
label1.setFont(font1);
label1.setAlignmentY(0);
textField1 = new JTextField(28);
centerPanel.add(label1);
centerPanel.add(textField1);

label2 = new JLabel("Name");
label2.setFont(font1);
label2.setHorizontalAlignment(JLabel.LEFT);
textField2 = new JTextField(28);
centerPanel.add(label2);
centerPanel.add(textField2);

label3 = new JLabel("Address");
label3.setFont(font1);
label3.setHorizontalAlignment(JLabel.LEFT);
textField3 = new JTextField(28);
centerPanel.add(label3);
centerPanel.add(textField3);

label4 = new JLabel("Phone No");
label4.setFont(font1);
label4.setHorizontalAlignment(JLabel.LEFT);
textField4 = new JTextField(28);
centerPanel.add(label4);
centerPanel.add(textField4);

JPanel southPanel = new JPanel(new FlowLayout(FlowLayout.RIGHT));
button1 = new JButton();
button1.setText("Add Student");
button1.setFont(font1);
button1.setHorizontalAlignment(JButton.RIGHT);
southPanel.add("South",button1);

button2 = new JButton();
button2.setText("Cancel");
button2.setFont(font1);
button2.setAlignmentX(RIGHT_ALIGNMENT);
southPanel.add("South",button2);
add("Center",centerPanel);
```

```

        add("South", southPanel);

        setVisible(true);
    }
}

class mine{
    public static void main(String[] args) {
        new Form();
    }
}

```

Q18.)

In this exercise show window name JComboBox and in the top middle of window has a bar and it have ranges of colour and we can select any colour.

Q19.)

```

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

class Frame extends JFrame {
    JLabel titleLabel, label1, label2, label3, label4;
    JTextField textField1, textField2, textField3, textField4;
    JButton button1, button2;

    Frame() {
        setSize(400, 200);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Student Detail Form");
        setLayout(new GridLayout(4, 4));
        Font font1 = new Font("", 4, 15);

        label1 = new JLabel("Student id");
        label1.setFont(font1);
        textField1 = new JTextField(12);
        add(label1);
        add(textField1);

        label2 = new JLabel("Name");
        label2.setFont(font1);
        textField2 = new JTextField(5);
    }
}

```

```

        add(label2);
        add(textField2);

        label3 = new JLabel("Address");
        label3.setFont(font1);
        textField3 = new JTextField(5);
        add(label3);
        add(textField3);

        label4 = new JLabel("Phone No");
        label4.setFont(font1);
        textField4 = new JTextField(5);
        add(label4);
        add(textField4);

        setVisible(true);
    }
}

class Example{
    public static void main(String[] args) {
        new Frame();
    }
}

```

Q20.)

```

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

class Frame extends JFrame {
    JLabel titleLabel, label1, label2, label3, label4;
    JTextField text1, text2, text3, text4;
    JButton button1, button2;

    Frame() {
        setSize(400, 200);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Student Detail Form");
        setLayout(new BorderLayout());
    }
}

```



```
titleLabel = new JLabel("Student Detail Form");
Font font = new Font("", 1, 20);
titleLabel.setFont(font);
titleLabel.setHorizontalAlignment(JLabel.CENTER);
add("North", titleLabel);

JPanel centerPanel = new JPanel(new GridLayout(4, 4));

Font font1 = new Font("", 4, 15);
label1 = new JLabel("Student id");
label1.setFont(font1);
text1 = new JTextField(12);
centerPanel.add(label1);
centerPanel.add(text1);

label2 = new JLabel("Name");
label2.setFont(font1);
text2 = new JTextField(5);
centerPanel.add(label2);
centerPanel.add(text2);

label3 = new JLabel("Address");
label3.setFont(font1);
text3 = new JTextField(5);
centerPanel.add(label3);
centerPanel.add(text3);

label4 = new JLabel("Phone No");
label4.setFont(font1);
text4 = new JTextField(5);
centerPanel.add(label4);
centerPanel.add(text4);

JPanel southPanel = new JPanel(new FlowLayout(FlowLayout.RIGHT));

button1 = new JButton();
button1.setText("Add Student");
button1.setFont(font1);
button1.setHorizontalAlignment(JButton.RIGHT);
southPanel.add("South", button1);
```

```

        button2 = new JButton();
        button2.setText("Cancel");
        button2.setFont(font1);
        button2.setAlignmentX(RIGHT_ALIGNMENT);
        southPanel.add("South",button2);
        add("Center",centerPanel);
        add("South",southPanel);

        setVisible(true);
    }
}
class Example{
    public static void main(String[] args) {
        new Frame();
    }
}

```

Q21.)

The toggle button allows the user to switch between two states ("Yes" and "No") by clicking on it. When the button is clicked. If "Yes" is selected, it switches to "No". If "No" is selected, it switches to "Yes".

Q22.)

```

import javax.swing.*;
import java.awt.*;
class Form extends JFrame {
    JLabel titleLabel, label2, label3, label4;
    JTextField text2, text3;
    JButton button1, button2;
    JRadioButton maleButton, FemaleButton;

    Form() {
        setSize(375, 200);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle(" ");
        setLayout(new BorderLayout());

        titleLabel = new JLabel("Student Detail Form");
        Font font = new Font("", 1, 18);
    }
}

```

```
titleLabel.setFont(font);
titleLabel.setHorizontalAlignment(JLabel.CENTER);
add("North",titleLabel);

JPanel centerPanel = new JPanel(new FlowLayout(FlowLayout.LEFT));
Font font1 = new Font("",1,11);

label2 = new JLabel("Name ");
label2.setFont(font1);
label2.setHorizontalAlignment(JLabel.LEFT);
text2 = new JTextField(28);
centerPanel.add(label2);
centerPanel.add(text2);

label3 = new JLabel("Address");
label3.setFont(font1);
label3.setHorizontalAlignment(JLabel.LEFT);
text3 = new JTextField(28);
centerPanel.add(label3);
centerPanel.add(text3);

label4 = new JLabel("Gender");
label4.setFont(font1);
label4.setHorizontalAlignment(JLabel.LEFT);
centerPanel.add(label4);
maleButton = new JRadioButton();
maleButton.setFont(font1);
maleButton.setText("Male");
centerPanel.add(maleButton);

FemaleButton = new JRadioButton();
FemaleButton.setFont(font1);
FemaleButton.setText("Female");
centerPanel.add(FemaleButton);

JPanel southPanel = new JPanel(new FlowLayout(FlowLayout.RIGHT));
button1 = new JButton();
button1.setText("Add Student");
button1.setFont(font1);
button1.setHorizontalAlignment(JButton.RIGHT);
```

```

        southPanel.add("South",button1);

        button2 = new JButton();
        button2.setText("Cancel");
        button2.setFont(font1);
        button2.setAlignmentX(RIGHT_ALIGNMENT);
        southPanel.add("South",button2);
        add("Center",centerPanel);
        add("South",southPanel);

        setVisible(true);
    }
}
class Example{
    public static void main(String[] args) {
        new Form();
    }
}

```

Q23.)

```

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

class Frame extends JFrame {
    JCheckBox label1,label2,label3,label4;

    Frame() {
        setSize(400,100);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("RadioButton Test");
        setLayout(new FlowLayout());

        Font font1 = new Font("",1,11);
        label2 = new JCheckBox("Plain");
        label2.setFont(font1);
        add(label2);

        label3 = new JCheckBox("Bold");

```

```

        label3.setFont(font1);
        add(label3);

        label4 = new JCheckBox("Italic");
        label4.setFont(font1);
        add(label4);

        label11 = new JCheckBox("Bold/Italic");
        label11.setFont(font1);
        add(label11);

        setVisible(true);
    }
}

class Example{
    public static void main(String[] args) {
        new Frame();
    }
}

```

Q24.)

```

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

class Form extends JFrame {
    JLabel label, l1;
    JComboBox year, date, month;

    Form() {
        setSize(400, 150);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("");
        setLayout(new BorderLayout());

        Font font = new Font("", 1, 15);
        Font font1 = new Font("", 1, 11);
        label = new JLabel("Combo Box Demo");
        label.setFont(font);
        label.setHorizontalAlignment(SwingConstants.CENTER);
    }
}

```

```

        add("North",label);

        JPanel centerPanel = new JPanel(new FlowLayout());
        add("Center",centerPanel);

        l1 = new JLabel("Date");
        l1.setFont(font1);
        centerPanel.add(l1);
        centerPanel.add(Box.createRigidArea(new Dimension(20,0)));

        String[] y1
    ={"2000","2001","2002","2003","2004","2005","2006","2007","2008","2009","2
    010","2011","2012","2013","2014","2015","2016","2017","2018","2019","2020"
    ,"2021","2022","2023","2024"};

        year = new JComboBox(y1);
        year.getSelectedItem();
        centerPanel.add(year);
        centerPanel.add(Box.createRigidArea(new Dimension(20,0)));

        String[] m1
    ={"January","February","March","April","May","June","July","August","Septe
    mber","October","November","December"};

        month = new JComboBox(m1);
        month.getSelectedItem();
        centerPanel.add(month);
        centerPanel.add(Box.createRigidArea(new Dimension(20,0)));

        String[] d1
    ={"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"}
    ;

        date = new JComboBox(d1);
        date.getSelectedItem();
        centerPanel.add(date);

        setVisible(true);
    }
}

class Example{
    public static void main(String[] args) {

```

```
        new Form();
    }
}
```

Q25.)

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

class Frame extends JFrame {
    JLabel label;
    JSlider
slider, slider1, slider2, slider3, slider4, slider5, slider6, slider7, slider8, slider9;

    Frame() {
        setSize(300, 300);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("");
        setLayout(new BorderLayout());

        Font font = new Font("", 1, 15);
        label = new JLabel("Equalizer");
        label.setFont(font);
        label.setHorizontalAlignment(SwingConstants.CENTER);
        add("North", label);

        JPanel panel = new JPanel(new FlowLayout());
        add("Center", panel);

        slider = new JSlider(JSlider.VERTICAL);
        slider.setValue(40);
        slider.setPaintLabels(true);
        panel.add(slider);

        slider1 = new JSlider(JSlider.VERTICAL);
        slider1.setValue(60);
        slider1.setPaintLabels(true);
        panel.add(slider1);
    }
}
```

```
slider2 = new JSlider(JSlider.VERTICAL);
slider2.setPaintLabels(true);
slider2.setValue(35);
panel.add(slider2);

slider3 = new JSlider(JSlider.VERTICAL);
slider3.setPaintLabels(true);
slider3.setValue(60);
panel.add(slider3);

slider4 = new JSlider(JSlider.VERTICAL);
slider4.setPaintLabels(true);
slider4.setValue(20);
panel.add(slider4);

slider5 = new JSlider(JSlider.VERTICAL);
slider5.setPaintLabels(true);
slider5.setValue(60);
panel.add(slider5);

slider6 = new JSlider(JSlider.VERTICAL);
slider6.setPaintLabels(true);
slider6.setValue(70);
panel.add(slider6);

slider7 = new JSlider(JSlider.VERTICAL);
slider7.setPaintLabels(true);
slider7.setValue(80);
panel.add(slider7);

slider8 = new JSlider(JSlider.VERTICAL);
slider8.setPaintLabels(true);
slider8.setValue(25);
panel.add(slider8);

slider9 = new JSlider(JSlider.VERTICAL);
slider9.setPaintLabels(true);
slider9.setValue(10);
panel.add(slider9);
```



```

        setVisible(true);
    }
}

class Example{
    public static void main(String[] args) {
        new Frame();
    }
}

```

Q26.)

```

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

class Frame extends JFrame {
    JTextField textField1,textField2;
    JLabel label,userName,passworded,Database,Encryption,status;
    JButton okButton,closeButton,helpButton;
    JComboBox database;
    JCheckBox box1;

    Frame() {
        setSize(400,200);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("");
        setLayout(new FlowLayout(FlowLayout.LEFT));

        Font font = new Font("",0,13);
        userName = new JLabel("User Name: ");
        userName.setFont(font);
        add(userName);
        textField1 = new JTextField(22);
        textField1.setFont(font);
        add(textField1);

        okButton = new JButton();
        okButton.setText(" Ok ");
        setFont(font);
        add(okButton);
    }
}

```

```
passworded = new JLabel("Password: ");
passworded.setFont(font);
add(passworded);

textField2= new JTextField(22);
textField2.setFont(font);
add(textField2);

closeButton = new JButton();
closeButton.setText("Close");
setFont(font);
add(closeButton);

Database = new JLabel("Database:");
Database.setFont(font);
add(Database);

String[] x = {"Common", "Uncommon "};
database = new JComboBox(x);
database.getSelectedItem();
add(database);

helpButton = new JButton();
helpButton.setText("Help ");
setFont(font);
add(helpButton);

label = new JLabel(" ");
add(label);

box1 = new JCheckBox("Remember Password ");
box1.setAlignmentX(JCheckBox.CENTER_ALIGNMENT);
box1.setFont(font);
add(box1);

Encryption = new JLabel("Encryption Status: ");
Encryption.setFont(font);
add(Encryption);
```

```

        status = new JLabel("Unencrypted");
        status.setFont(font);
        add(status);

        setVisible(true);
    }
}
class Example{
    public static void main(String[] args) {
        new Frame();
    }
}

```

Q27.)

```

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

class Notepad extends JFrame{
    JTextArea textArea;
    JMenuBar menuBar;
    JMenu fileMenu, editMenu, formatMenu, viewMenu, helpMenu;
    JMenuItem item1, item2, item3, item4, item5, item6, item7;

    Notepad() {

        setSize(500, 400);
        setLocationRelativeTo(null);
        setTitle("Untitled -Notepad");
        setDefaultCloseOperation(EXIT_ON_CLOSE);

        textArea = new JTextArea();
        textArea.setFont(getFont());
        menuBar = new JMenuBar();
        fileMenu = new JMenu("File");

        item1 = new JMenuItem("New");
        item2 = new JMenuItem("Open...");
        item3 = new JMenuItem("Save ");
        item4 = new JMenuItem("Save as...");
    }
}

```

```

        item5 = new JMenuItem("Page Setup...");
        item6 = new JMenuItem("Print....");
        item7 = new JMenuItem("Exit");

        fileMenu.add(item1);
        fileMenu.add(item2);
        fileMenu.add(item3);
        fileMenu.add(item4);
        fileMenu.add(item5);
        fileMenu.add(item6);
        fileMenu.add(item7);

        editMenu = new JMenu("Edit");
        formatMenu = new JMenu("Format");
        viewMenu = new JMenu("View");
        helpMenu = new JMenu("Help");

        menuBar.add(fileMenu);
        menuBar.add(editMenu);
        menuBar.add(formatMenu);
        menuBar.add(viewMenu);
        menuBar.add(helpMenu);
        setJMenuBar(menuBar);

        JScrollPane scrollPane = new JScrollPane(textArea);
        add(scrollPane);

        setVisible(true);
    }
}

class Example{
    public static void main(String[] args) {
        new Notepad();
    }
}

```

Q28.)

```

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

```

```

class SliderFrame extends JFrame{
    JSlider slider;

    SliderFrame(){
        setSize(250, 100);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
        setTitle("Slider");
        setLayout(new FlowLayout());

        slider = new JSlider(0,50,JSlider.HORIZONTAL);
        slider.setMajorTickSpacing(10);
        slider.setPaintLabels(true);
        add(slider);

        setVisible(true);
    }
}

class Example{
    public static void main(String[] args) {
        new SliderFrame();
    }
}

```

Q29.)

```

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

class SliderFrame extends JFrame{
    JSlider slider1,slider2,slider3;
    JLabel label1,label2,label3;

    SliderFrame(){
        setSize(300, 300);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);
    }
}

```

```

setTitle("Slider");
setLayout(new BorderLayout());

Font font = new Font("",1,11);
JPanel southPanel = new JPanel(new GridLayout(2,0));
add("South",southPanel);

JPanel centerPanel = new JPanel(new GridLayout(2,0));
add("Center",centerPanel);

JPanel northPanel = new JPanel(new GridLayout(2,0));
add("North",northPanel);

slider1 = new JSlider(JSlider.HORIZONTAL);
slider1.setPaintLabels(true);
label1 = new JLabel("JSlider Without Tick Marks");
label1.setFont(font);
northPanel.add(label1);
northPanel.add(slider1);

slider2 = new JSlider(0,100,JSlider.HORIZONTAL);
slider2.setMajorTickSpacing(5);
label2 = new JLabel("JSlider with Tick Mark ");
label2.setFont(font);
centerPanel.add(label2);
centerPanel.add(slider2);

slider3 = new JSlider(JSlider.HORIZONTAL);
slider3.setMajorTickSpacing(20);
slider3.setPaintLabels(true);
label3 = new JLabel("JSlider with Tick Mark & Labels");
label3.setFont(font);
southPanel.add(label3);
southPanel.add(slider3);

setVisible(true);
}
}
class Example{

```

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

Q30.)

```
import javax.swing.*;  
import javax.swing.table.DefaultTableModel;  
import java.awt.*;  
  
class ViewStudent extends JFrame {  
    DefaultTableModel tableModel;  
    JTable table;  
    JLabel label;  
  
    ViewStudent() {  
        setSize(700, 250);  
        setDefaultCloseOperation(EXIT_ON_CLOSE);  
        setLocationRelativeTo(null);  
        setTitle("View Student");  
        setLayout(new BorderLayout());  
  
        Font font = new Font("", Font.BOLD, 25);  
        label = new JLabel("Time Table", JLabel.CENTER);  
        label.setFont(font);  
        add(label, BorderLayout.NORTH);  
  
        JLabel labelWest = new JLabel(" ");  
        add(labelWest, BorderLayout.WEST);  
        JLabel labelEast = new JLabel(" ");  
        add(labelEast, BorderLayout.EAST);  
  
        String[] columns = {"Monday", "Tuesday", "Wednesday",  
"Thursday", "Friday", "Saturday", "Sunday"};  
  
        tableModel = new DefaultTableModel(columns, 9);  
        table = new JTable(tableModel);  
  
        JScrollPane scrollPane = new JScrollPane(table);
```

```
        add(scrollPane, BorderLayout.CENTER);

        setVisible(true);
    }
}

class Example {
    public static void main(String[] args) {
        new ViewStudent();
    }
}
```