Practical 1

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Design an application to demonstrate the Radio Button and Check box.

import java.awt.\*;

class PracticalNo\_1Q1 extends Frame{

public PracticalNo\_1Q1(){

Frame myFrame = new Frame("Radion Button & Checkbox");

myFrame.setLayout(new FlowLayout());

myFrame.setTitle("Radio & Checkbox Button");

myFrame.setSize(500, 500);

myFrame.setVisible(true);

myFrame.setResizable(true);

Label infoOfProgrammer = new Label("// Programmer: Harsh Kale");

Font myFont = new Font("Lucida Console", Font.BOLD, 17);

Font myNewFont = new Font("Arial", Font.BOLD, 17);

Label myLable = new Label("This is a program Demonstrating the Radion button and Check box!");

myLable.setFont(myFont);

Checkbox myCheckboxOne = new Checkbox("Python", true);

myCheckboxOne.setFont(myNewFont);

Checkbox myCheckboxTwo = new Checkbox("JavaScript", true);

myCheckboxTwo.setFont(myNewFont);

CheckboxGroup myCheckboxGroup = new CheckboxGroup();

Checkbox radioBtnOne = new Checkbox("Genuis Programmer", true, myCheckboxGroup);

radioBtnOne.setFont(myNewFont);

Checkbox radioBtnTwo = new Checkbox("Hello world Programmer", true, myCheckboxGroup);

radioBtnTwo.setFont(myNewFont); Component[] myObjects = {infoOfProgrammer, myLable, myCheckboxOne, myCheckboxTwo, radioBtnOne, radioBtnTwo};

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

myFrame.add(myObjects[i]);

}

}

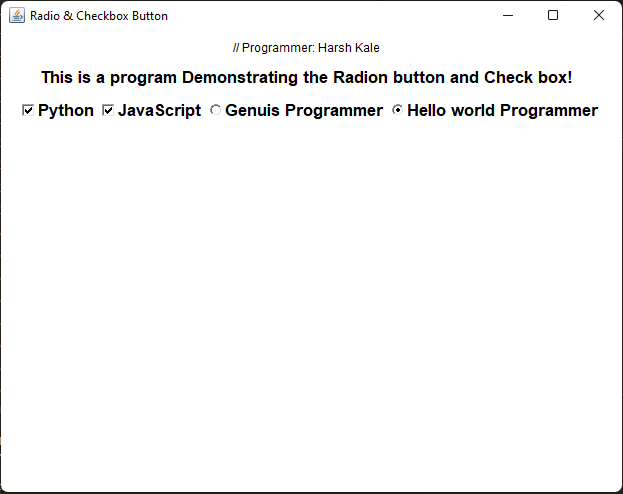
public static void main(String[] args) {

new PracticalNo\_1Q1();

}

}

Output:



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Design an application to create a form with the use of text field, text area, button and label.

import java.awt.\*;

public class PracticalNo\_1Q2 extends Frame {

public PracticalNo\_1Q2(){

setLayout(new FlowLayout());

setTitle("Application of Text Field, Text Area, Button and Label!");

setSize(700, 700);

setVisible(true);

Font ff1 = new Font("Times New Roman", Font.BOLD, 12);

Font ff2 = new Font("Arial", Font.ITALIC, 17);

Label label1 = new Label("Application of Textfield, Textarea, Button and Label! By Developer Harsh Kale");

label1.setFont(ff1);

label1.setBounds(15, 40, 450, 30);

Label label2 = new Label("Form", Label.CENTER);

label2.setFont(ff2);

label2.setBounds(210, 90, 80, 20);

Label ln = new Label("Enter Your Name: ", Label.LEFT);

TextField tfn = new TextField();

ln.setBounds(30, 140, 110, 20);

tfn.setBounds(180, 140, 250, 20);

Label rollno = new Label("Enter Your Roll No.: ", Label.LEFT);

TextField tfrn = new TextField();

rollno.setBounds(30, 180, 150, 20);

tfrn.setBounds(180, 180, 250, 20);

Label addrs = new Label("Enter Your Address: ", Label.LEFT);

TextArea taddress = new TextArea();

addrs.setBounds(30, 220, 170, 20);

taddress.setBounds(180, 250, 250, 125);

Button submit = new Button("Submit!");

Button reset = new Button("Reset!!");

submit.setBounds(200, 425, 100, 30);

reset.setBounds(200, 455, 100, 30);

add(label1);

add(label2);

add(ln);

add(rollno);

add(tfn);

add(tfrn);

add(addrs);

add(taddress);

add(submit);

add(reset);

}

public static void main(String[] args) {

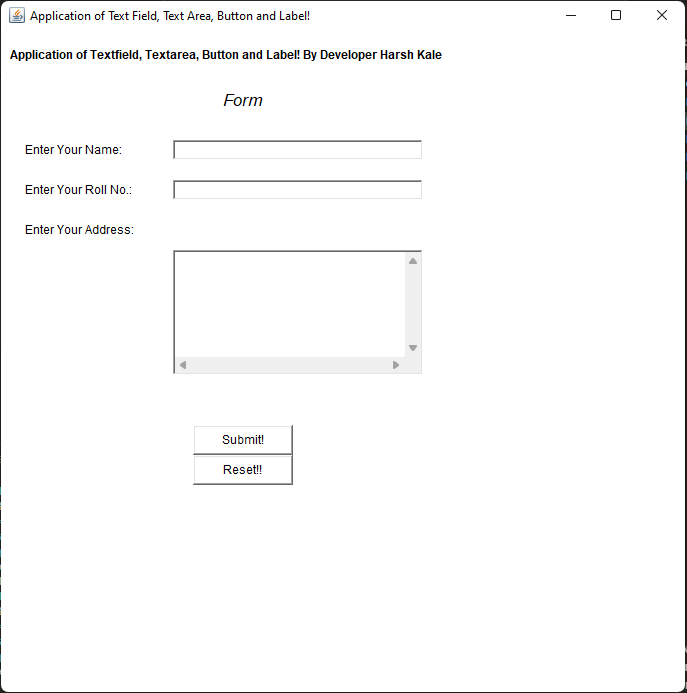
System.out.println("Hello, world Programmer! Harsh Moreshwar Kale");

new PracticalNo\_1Q2();

}

}

Output:



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Develop a program using Label to display the message "Welcome to Java Programming".

import java.awt.\*;

public class PracticalNo\_1Q3 extends Frame {

public PracticalNo\_1Q3(){

setTitle("Displaying the \'Welcome to Java Programming\' message on the frame!");

setSize(700, 700);

setVisible(true);

Font ff = new Font("Arial", Font.ITALIC, 20);

Label l = new Label("Welcome to Java Programming", Label.LEFT);

l.setFont(ff);

add(l);

}

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_1Q3();

}

}

Output:



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 4:

// Develop a Program to Select Multiple Languages known to User.

import java.awt.\*;

public class PracticalNo\_1Q4 extends Frame{

public PracticalNo\_1Q4(){

setLayout(new FlowLayout());

setTitle("Advance Java Program!");

setSize(700, 700);

setVisible(true);

Label l = new Label("Select from the following! which language you used in your daily life!");

Checkbox cmr = new Checkbox("Marathi (मराठी)");

Checkbox chi = new Checkbox("Hindi");

Checkbox csk = new Checkbox("Sanskrit");

Checkbox cpy = new Checkbox("Python");

Checkbox cc = new Checkbox("C");

add(l);

add(cmr);

add(chi);

add(csk);

add(cpy);

add(cc);

}

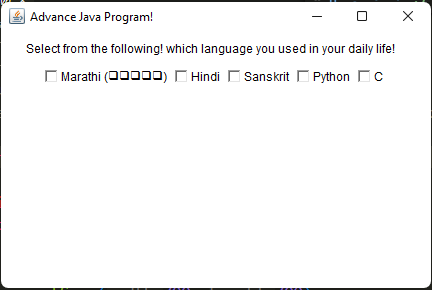
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

new PracticalNo\_1Q4();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 5:

// Develop a Program to Create 3 buttons with caption ok, reset, cancel.

import java.awt.\*;

public class PracticalNo\_1Q5 extends Frame{

public PracticalNo\_1Q5(){

setLayout(new FlowLayout());

setTitle("Advance Java Programming By Harsh Kale!");

setSize(700, 700);

setVisible(true);

Label l = new Label("Developer Harsh Moreshwar Kale, Click through the following buttons!");

Button ok = new Button("OK");

Button reset = new Button("RESET");

Button cancel = new Button("CANCEL");

add(l);

add(ok);

add(reset);

add(cancel);

}

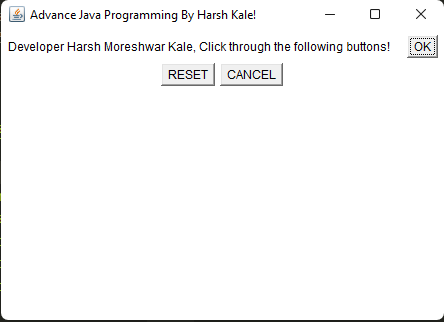
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_1Q5();

}

}



Practical 2

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write a java program to show following output in list!

import java.awt.\*;

public class PracticalNo\_2Q1 extends Frame {

public PracticalNo\_2Q1(){

setLayout(new FlowLayout());

setTitle("Demo of List in Advance Java Programming!");

setSize(700, 700);

setVisible(true);

Label l = new Label("Here is the program of list in advance java programming by Harsh Kale!");

List list = new List(3, false);

list.add("Summer");

list.add("Winter");

list.add("Rainy");

add(l);

add(list);

}

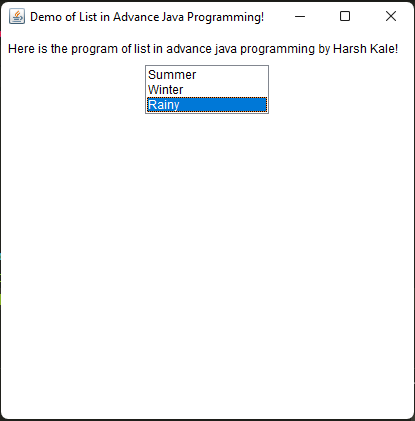
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_2Q1();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Develop an application using list components to add names of 10 different cities.abstract

import java.awt.\*;

public class PracticalNo\_2Q2 extends Frame {

public PracticalNo\_2Q2(){

setLayout(new FlowLayout());

setTitle("List Components In Advance Java Programming");

setSize(700, 700);

setVisible(true);

Label l = new Label("This Program is created by Harsh Kale!");

List list = new List(4, false);

list.add("Latur");

list.add("Barshi");

list.add("Solapur");

list.add("Nanded");

add(l);

add(list);

}

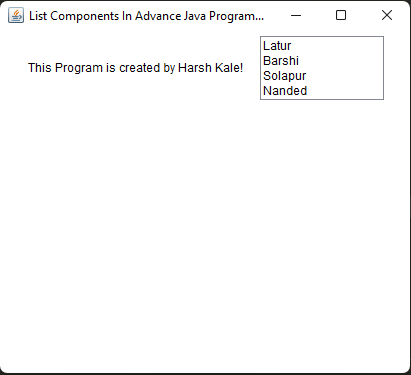
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

new PracticalNo\_2Q2();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Develop an application select multiple names of news paper.

import java.awt.\*;

public class PracticalNo\_2Q3 extends Frame {

public PracticalNo\_2Q3(){

setLayout(new FlowLayout());

setTitle("Program of List Components in Advance Java Programming!");

setSize(700, 700);

setVisible(true);

Label l = new Label("This is a program of compoenents to select the names of news papers by Harsh Kale!");

List list = new List(4, true);

list.add("Lokmat");

list.add("The New Indian Times");

list.add("The Hindu");

list.add("Dyandeep");

list.add("Maradhi Paper");

add(l);

add(list);

}

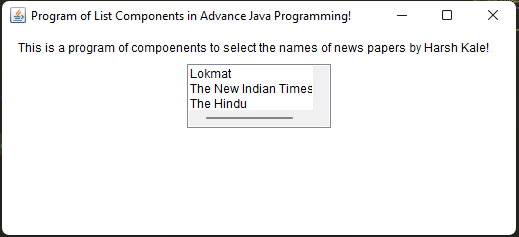
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

new PracticalNo\_2Q3();

}

}



Practical 3

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write a java program to demonstrate the use of grid layout of 5 \* 5

import java.awt.\*;

public class PracticalNo\_3Q1 extends Frame {

PracticalNo\_3Q1(){

setLayout(new GridLayout(5, 5));

setTitle("Program of Grid Layout In Advance Java Programin by Harsh kale");

setSize(700, 700);

setVisible(true);

for(int i = 1; i <= 20; i++){

add(new Label("Cell " + i));

}

}

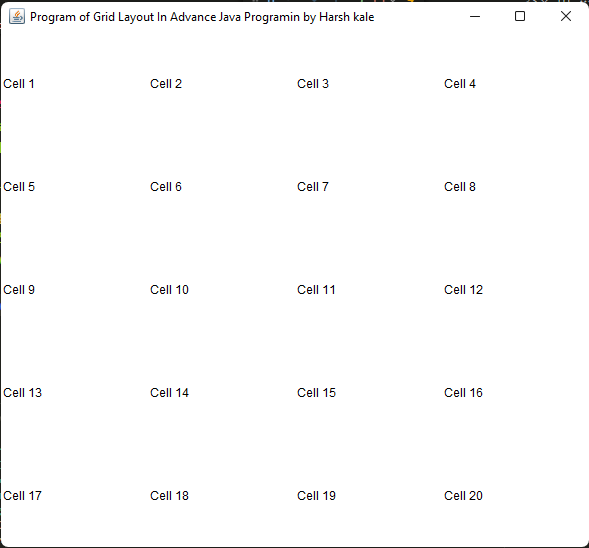
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

new PracticalNo\_3Q1();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Write a java program to display the No. of buttons from 0 to 0.

import java.awt.\*;

public class PracticalNo\_3Q2 extends Frame{

PracticalNo\_3Q2(){

setLayout(new GridLayout(3, 3));

setTitle("Program of Grid layout in Advance Java Programing by Harsh Kale!");

setSize(700, 700);

setVisible(true);

for(int i = 0; i <= 9; i++){

add(new Button("Harsh " + i));

}

}

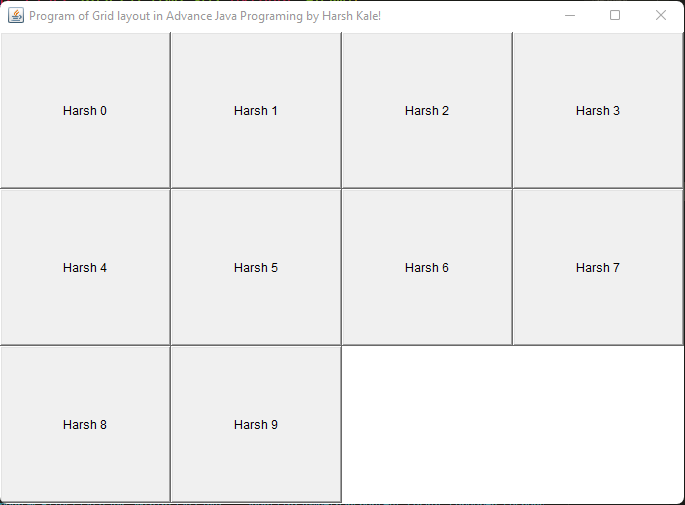
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_3Q2();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Write a java program to display the No. of buttons from 0 to 0.

import java.awt.\*;

public class PracticalNo\_3Q3 extends Frame{

PracticalNo\_3Q3(){

setLayout(new GridLayout(3, 2, 20, 20));

setTitle("Program of Grid Layout in Advance Java Programing by Harsh Kale!");

setSize(700, 700);

setVisible(true);

for(int i = 0; i <= 7; i++){

Button btn = new Button("Harsh " + i);

add(btn);

}

}

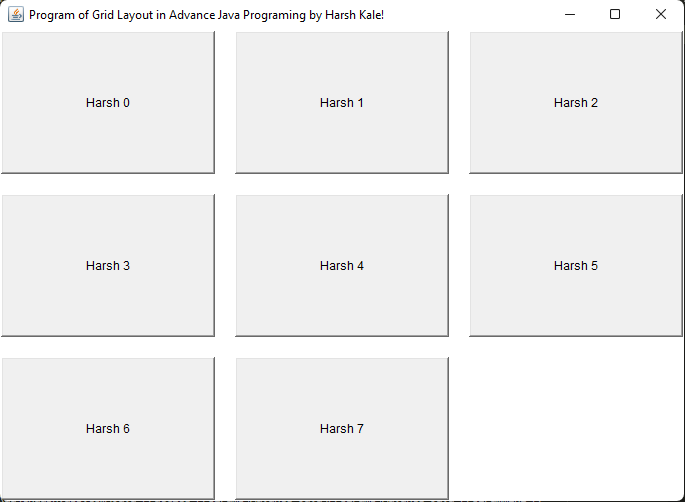
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_3Q3();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 4:

// Write a java program to display the use of border layout.!

import java.awt.\*;

public class PracticalNo\_3Q4 extends Frame{

PracticalNo\_3Q4(){

setTitle("Program of border layout in advance java programming");

setSize(700, 700);

setVisible(true);

setLayout(new BorderLayout(10, 10));

Button northButton = new Button("North");

add(northButton, BorderLayout.NORTH);

Button southButton = new Button("South");

add(southButton, BorderLayout.SOUTH);

Button eastButton = new Button("East"); add(eastButton, BorderLayout.EAST);

Button wesButton = new Button("West"); add(wesButton, BorderLayout.WEST);

Button centerButton = new Button("Center");

add(centerButton, BorderLayout.CENTER);

}

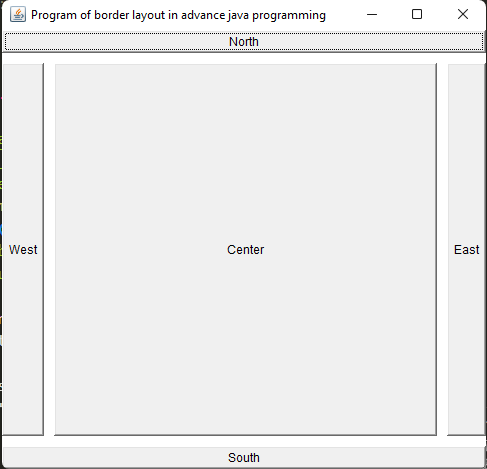
public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_3Q4();

}

}



Practical 4

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write the Output of the following program!

import java.awt.\*;

import java.awt.event.\*;

import javax.swing.\*;

public class PracticalNo\_4Q1 extends JFrame implements ActionListener{

CardLayout card;

JButton btn1, btn2, btn3;

Container c;

PracticalNo\_4Q1(){

c = getContentPane();

card = new CardLayout(40, 30);

c.setLayout(card);

btn1 = new JButton("ReactJS");

btn2 = new JButton("NodeJS");

btn3 = new JButton("VueJS");

btn1.addActionListener(this);

btn2.addActionListener(this);

btn3.addActionListener(this);

c.add("A", btn1);

c.add("B", btn2);

c.add("C", btn3);

}

public void actionPerformed(ActionEvent e){

card.next(c);

}

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

PracticalNo\_4Q1 p = new PracticalNo\_4Q1();

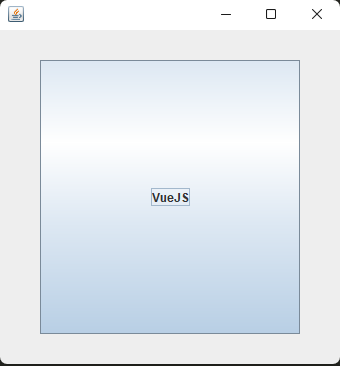
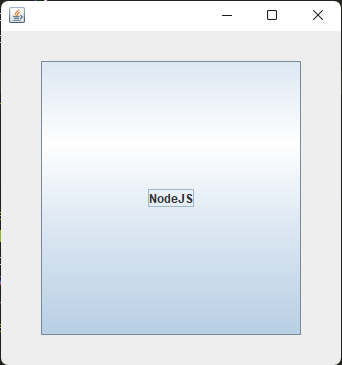
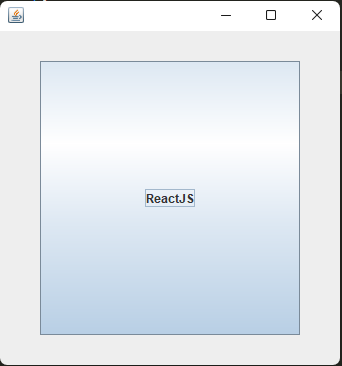
p.setSize(700, 700);

p.setVisible(true);

p.setDefaultCloseOperation(EXIT\_ON\_CLOSE);

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Write a java program to display the output of the following code.

import java.awt.\*;

import javax.swing.\*;

public class PracticalNo\_4Q2 extends JFrame {

PracticalNo\_4Q2() {

Label l = new Label("GridBagLayout Program by Harsh Kale!");

add(l);

GridBagLayout grid = new GridBagLayout(); GridBagConstraints gbc = new GridBagConstraints();

setLayout(grid);

setTitle("GridBag Layout Program By Harsh Kale");

GridBagLayout layout = new GridBagLayout();

this.setLayout(layout);

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.gridx = 0;

gbc.gridy = 0;

this.add(new Button("Button One"), gbc);

gbc.gridx = 1;

gbc.gridy = 0;

this.add(new Button("Button two"), gbc);

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.ipady = 20;

gbc.gridx = 0;

gbc.gridy = 1;

this.add(new Button("Button Three"), gbc);

gbc.gridx = 1;

gbc.gridy = 1;

this.add(new Button("Button Four"), gbc);

gbc.gridx = 0;

gbc.gridy = 2;

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.gridwidth = 2;

this.add(new Button("Button Five"), gbc);

setSize(700, 700);

setPreferredSize(getSize());

setVisible(true);

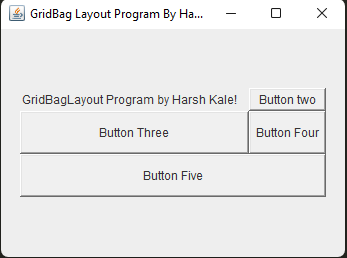
setDefaultCloseOperation(EXIT\_ON\_CLOSE);

}

public static void main(String[] args) {

System.out.println("Developer Harsh MOreshwar Kale!");

new PracticalNo\_4Q2(); }}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Write a java program to display following output of GridBagLayout.

import java.awt.\*;

import javax.swing.\*;

public class PracticalNo\_4Q3 extends JFrame {

PracticalNo\_4Q3(){

setSize(700, 700);

setPreferredSize(getSize());

setVisible(true);

setDefaultCloseOperation(EXIT\_ON\_CLOSE);

GridBagLayout grid = new GridBagLayout();

GridBagConstraints gbc = new GridBagConstraints();

setLayout(grid);

setTitle("GridBag Layout Example By Harsh Kale");

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.gridx = 0; gbc.gridy = 0; this.add(new Label("Name: "), gbc);

gbc.gridx = 1;

gbc.gridy = 0;

this.add(new TextField("Harsh", 1), gbc);

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.gridx = 0;

gbc.gridy = 1;

gbc.weightx=0;

gbc.weighty=0;

this.add(new Label("Message"), gbc);

gbc.gridx = 1; gbc.gridy = 1;

this.add(new TextArea(3, 5), gbc);

gbc.gridx = 0;

gbc.gridy = 2;

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.gridwidth = 2;

gbc.gridheight=1;

gbc.insets= new Insets (30, 0, 10, 0); this.add(new JButton("Submit"), gbc);

}

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale!");

new PracticalNo\_4Q3();

}

}



Practical 5

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write a java program to create menu of different colors and disable menu item for Black Color.

import java.awt.\*;

public class PracticalNo\_5Q1 extends Frame{

MenuBar mb;

Menu colorNameMenu;

MenuItem redItem, orangItem, blueItem, blackItem;

PracticalNo\_5Q1(){

setTitle("Advane Java Menu Program By Harsh Kale");

setSize(700, 700);

mb = new MenuBar();

colorNameMenu = new Menu("Colors");

redItem = new MenuItem("Red");

orangItem = new MenuItem("Orange");

blueItem = new MenuItem("Blue");

blackItem = new MenuItem("Black");

blackItem.setEnabled(false);

colorNameMenu.add(redItem);

colorNameMenu.add(orangItem);

colorNameMenu.add(blueItem);

colorNameMenu.add(blackItem);

mb.add(colorNameMenu);

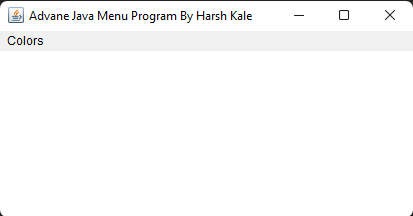
setMenuBar(mb);

setVisible(true);

}

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale"); new PracticalNo\_5Q1(); }}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Find an error and correct it also display the output after corrections.

import java.awt.\*;

import java.awt.event.KeyEvent;

public class PracticalNo\_5Q2 extends Frame{

MenuBar mb;

MenuItem m1, m2, m3;

Menu mn;

MenuShortcut ms;

PracticalNo\_5Q2(){

setTitle("Menubar Program By Harsh Kale!");

setSize(700, 700); setLayout(null);

ms = new MenuShortcut(KeyEvent.VK\_X);

mn = new Menu("File");

mb = new MenuBar();

m1 = new MenuItem("Open with VS Code");

m2 = new MenuItem("Auto Save");

m3 = new MenuItem("Harsh Kale");

mn.add(m1);

mn.add(m2);

mn.addSeparator();

mn.add(m3);

mb.add(mn);

setMenuBar(mb);

setVisible(true);

}

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

new PracticalNo\_5Q2();

}

}



Practical 6

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write a Program for Following output!

import java.awt.FlowLayout;

import javax.swing.\*;

public class PracticalNo\_6Q1 extends JFrame {

PracticalNo\_6Q1(){

super("ComboBox Program by Harsh Kale");

setSize(700, 700);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

String cities[] = {"Solapur", "Barshi", "Latur", "Banglore"};

JComboBox<String> comboBox = new JComboBox<>(cities);

JScrollPane scrollPane = new JScrollPane(comboBox);

add(scrollPane);

setVisible(true);

setLayout(new FlowLayout());

}

public static void main(String[] args) {

System.out.println("Developer Harsh Kale");

new PracticalNo\_6Q1();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Program using JComboBox to select different states of India or programming languages.

import java.awt.\*;

import javax.swing.JComboBox;

import javax.swing.JFrame;

import javax.swing.JScrollPane;

public class PracticalNo\_6Q2 extends JFrame{

PracticalNo\_6Q2(){

super("ComboBox Program by Harsh Kale");

setSize(700, 700);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

String cities[] = {"C", "C++", "C#", "Java", "Python", "R"};

JComboBox<String> comboBox = new JComboBox<>(cities);

JScrollPane scrollPane = new JScrollPane(comboBox);

add(scrollPane);

setVisible(true);

setLayout(new FlowLayout());

}

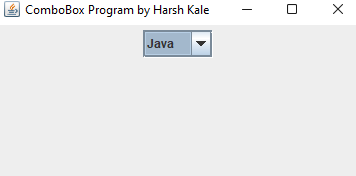
public static void main(String[] args) {

System.out.println("Developer Harsh Kale");

new PracticalNo\_6Q2();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Program using JScrollPane in Advance Java Programming.

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

public class PracticalNo\_6Q3 extends JFrame {

PracticalNo\_6Q3(){

super("ScrollPane Program in Advance Java Programming By Harsh Kale!");

setLayout(new BorderLayout());

setSize(400, 400);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

JTextArea t = new JTextArea();

for(int i = 0; i < 100; i++){

t.append("Hello, world programmer Harsh Kale \n");

}

JScrollPane scrollPane = new JScrollPane(t);

add(scrollPane, BorderLayout.CENTER);

setVisible(true);

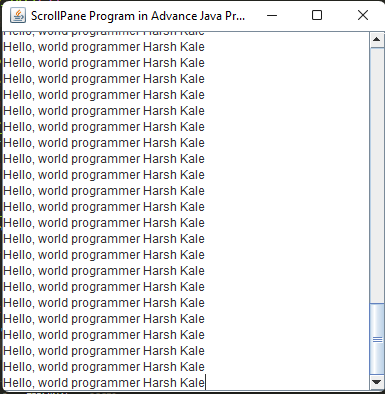
}

public static void main(String[] args) {

System.out.println("Developer Harsh Kale");

new PracticalNo\_6Q3();

}}



Practical 7

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write a Program for JTree Component!

import javax.swing.\*;

import javax.swing.tree.\*;

public class PracticalNo\_7Q1 extends JFrame{

PracticalNo\_7Q1(){

setTitle("JTree Program By Harsh Kale!");

setVisible(true);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

DefaultMutableTreeNode root = new DefaultMutableTreeNode("root");

DefaultMutableTreeNode n1 = new DefaultMutableTreeNode("Node first");

DefaultMutableTreeNode n2 = new DefaultMutableTreeNode("Node second");

DefaultMutableTreeNode n3 = new DefaultMutableTreeNode("Node third");

DefaultMutableTreeNode n4 = new DefaultMutableTreeNode("Node fourth");

n1.add(n3); n1.add(n4);

root.add(n1); root.add(n2);

JTree tree = new JTree(root);

JScrollPane scrollPane = new JScrollPane(tree);

getContentPane().add(scrollPane);

pack();

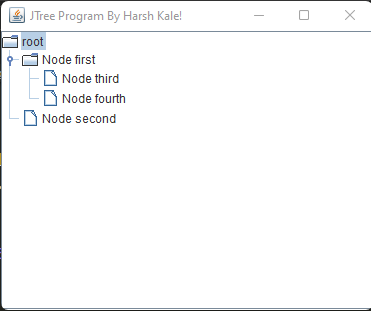
setSize(700, 700);

}

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

new PracticalNo\_7Q1(); }}



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// Question 1:

// Write a Program for Following output.

import javax.swing.\*;

import javax.swing.tree.\*;

public class PracticalNo\_7Q2 extends JFrame {

PracticalNo\_7Q2() {

setTitle("JTree Program By Harsh Kale");

setVisible(true);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

DefaultMutableTreeNode rootNode = new DefaultMutableTreeNode("India");

DefaultMutableTreeNode node1 = new DefaultMutableTreeNode("Maharashtra");

DefaultMutableTreeNode node2 = new DefaultMutableTreeNode("Gujrat");

DefaultMutableTreeNode node11 = new DefaultMutableTreeNode("Mumbai");

DefaultMutableTreeNode node12 = new DefaultMutableTreeNode("Pune");

DefaultMutableTreeNode node13 = new DefaultMutableTreeNode("Nashik");

DefaultMutableTreeNode node14 = new DefaultMutableTreeNode("Nagpur");

DefaultMutableTreeNode node15 = new DefaultMutableTreeNode("Latur");

node1.add(node11);

node1.add(node12);

node1.add(node13);

node1.add(node14);

node1.add(node15);

rootNode.add(node1);

rootNode.add(node2);

JTree tree = new JTree(rootNode);

JScrollPane scrollPane = new JScrollPane(tree);

getContentPane().add(scrollPane);

pack();

}

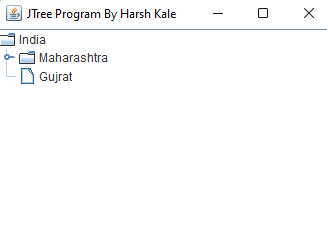
public static void main(String[] args) {

System.out.println("Developer Harsh Kale!");

new PracticalNo\_7Q2();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Program to show root directory and its sub folder of your system.

import java.awt.\*;

import java.io.\*;

import javax.swing.\*;

import javax.swing.tree.\*;

public class PracticalNo\_7Q3 {

public static void main(String[] args) {

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("JTree Program");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

File rootDir = new File("D:/");

DefaultMutableTreeNode root = new DefaultMutableTreeNode(rootDir);

DefaultTreeModel treeModel = new DefaultTreeModel(root); addSubfolders(root, rootDir);

JTree tree = new JTree(treeModel);

tree.setPreferredSize(new Dimension(300, 200));

frame.add(tree, BorderLayout.CENTER);

frame.pack(); // Use pack() to set the frame size based on its contents

frame.setVisible(true);

});

}

private static void addSubfolders(DefaultMutableTreeNode parent, File dir) {

File[] subDirs = dir.listFiles();

if (subDirs != null) {

for (File subDir : subDirs) {

if (subDir.isDirectory()) {

DefaultMutableTreeNode child = new DefaultMutableTreeNode(subDir);

parent.add(child);

addSubfolders(child, subDir);

} } } }}

Practical 8

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Develop a program to demonstrate the use of JTable.

import javax.swing.\*;

import javax.swing.table.DefaultTableModel;

import java.awt.\*;

public class PracticalNo\_8Q1 {

public static void main(String[] args) {

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("JTable Program By Harsh Kale");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

// Create sample data for the table

String[] columnNames = {"Name", "Age", "Country"};

Object[][] data = {

{"Harsh", 70, "Latur"},

{"Sanket", 25, "Sambhaji-Nagar"},

{"Wadkar", 35, "Moti Nagar"},

{"Omkar", 28, "Chincholi"},

{"Kale", 40, "Barshi"}

};

// Create a DefaultTableModel

DefaultTableModel model = new DefaultTableModel(data, columnNames);

// Create a JTable with the model

JTable table = new JTable(model);

// Create a JScrollPane to add the table to

JScrollPane scrollPane = new JScrollPane(table);

// Add the scroll pane to the frame

frame.add(scrollPane, BorderLayout.CENTER);

frame.pack();

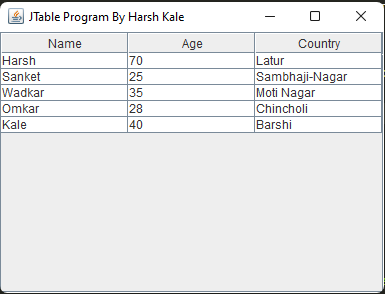
frame.setSize(400, 300);

frame.setVisible(true);

});

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Program to show root directory and its sub folder of your system.

import javax.swing.JFrame;

import javax.swing.JScrollPane;

import javax.swing.JTable;

import javax.swing.SwingUtilities;

import javax.swing.table.DefaultTableModel;

import java.awt.\*;

public class PracticalNo\_8Q2 {

public static void main(String[] args) {

System.out.println("Developer Harsh Moreshwar Kale");

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("JTable Program By Harsh Kale");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

// Create sample data for the table

String[] columnNames = {"ID", "Name", "Salary"};

Object[][] data = {

{1, "Harsh Kale", "70,00,00,000"},

{2, "Omanand Swami", "1200"},

{3, "Prathmesh Bavge", "200"},

{4, "Akshay Gitte", "2700"},

{5, "Amay Devshatwar", "Infinity"}

};

// Create a DefaultTableModel

DefaultTableModel model = new DefaultTableModel(data, columnNames);

// Create a JTable with the model

JTable table = new JTable(model);

// Create a JScrollPane to add the table to

JScrollPane scrollPane = new JScrollPane(table);

// Add the scroll pane to the frame

frame.add(scrollPane, BorderLayout.CENTER);

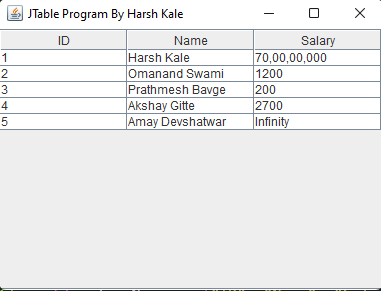
frame.pack();

frame.setSize(400, 300);

frame.setVisible(true);

});

}}



// Programmer: Harsh Moreshwar Kale

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// Question 3:

// Program to show table view of 10 students. (Name, Percentage, Grade).

import javax.swing.\*;

import javax.swing.table.DefaultTableModel;

import java.awt.\*;

public class PracticalNo\_8Q3 {

public static void main(String[] args) {

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("Student Table View");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

// Define column names

String[] columnNames = {"Name", "Percentage", "Grade"};

// Create sample data for 10 students

Object[][] data = {

{"Student 1", 85.5, "A"},

{"Student 2", 78.0, "B"},

{"Student 3", 92.3, "A"},

{"Student 4", 63.7, "C"},

{"Student 5", 77.8, "B"},

{"Student 6", 88.2, "A"},

{"Student 7", 72.5, "B"},

{"Student 8", 95.1, "A"},

{"Student 9", 61.9, "C"},

{"Student 10", 84.6, "B"} };

// Create a DefaultTableModel

DefaultTableModel model = new DefaultTableModel(data, columnNames);

// Create a JTable with the model

JTable table = new JTable(model);

// Create a JScrollPane to add the table to

JScrollPane scrollPane = new JScrollPane(table);

// Add the scroll pane to the frame

frame.add(scrollPane, BorderLayout.CENTER);

frame.pack();

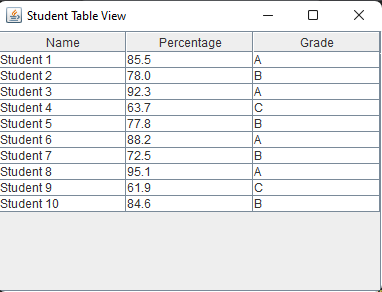
frame.setSize(400, 300);

frame.setVisible(true);

});

}

}



Practical 9

// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 1:

// Write a program to launch a JProgressBar.

import javax.swing.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class PracticalNo\_9Q1 {

public static void main(String[] args) {

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("JProgressBar By Harsh Kale!");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setSize(300, 100);

// Create a JProgressBar

JProgressBar progressBar = new JProgressBar(0, 100);

progressBar.setStringPainted(true);

// Create a JButton to start progress

JButton startButton = new JButton("Start Progress");

// ActionListener for the start button

startButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

// Simulate a task that takes some time

Thread taskThread = new Thread(new Runnable() {

public void run() {

for (int i = 0; i <= 100; i++) {

final int progressValue = i;

SwingUtilities.invokeLater(new Runnable() {

public void run() {

progressBar.setValue(progressValue);

}

});

try {

Thread.sleep(100); // Simulate some work

} catch (InterruptedException ex) {

ex.printStackTrace();

}

}

}

});

taskThread.start();

}

});

JPanel panel = new JPanel();

panel.add(progressBar);

panel.add(startButton);

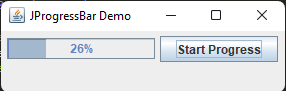
frame.add(panel);

frame.setVisible(true);

});

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 2:

// Develop a Program to Demonstrate the use of JProgressBar.

import javax.swing.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class PracticalNo\_9Q2 {

private static JProgressBar progressBar;

private static JButton startButton;

public static void main(String[] args) {

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("JProgressBar Program By Harsh Kale");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setSize(300, 100);

// Create a JProgressBar

progressBar = new JProgressBar(0, 100);

progressBar.setStringPainted(true);

// Create a JButton to start progress

startButton = new JButton("DownLoad MugBit!");

startButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

startProgress();

} });

JPanel panel = new JPanel();

panel.add(progressBar);

panel.add(startButton);

frame.add(panel);

frame.setVisible(true);

});

}

private static void startProgress() {

startButton.setEnabled(false); // Disable the button while the task is running

SwingWorker<Void, Integer> worker = new SwingWorker<Void, Integer>() {

@Override

protected Void doInBackground() throws Exception {

for (int i = 0; i <= 100; i++) {

Thread.sleep(100); // Simulate work (100 milliseconds)

publish(i); // Publish progress

}

return null;

}

@Override

protected void process(java.util.List<Integer> chunks) {

int latestProgress = chunks.get(chunks.size() - 1);

progressBar.setValue(latestProgress); // Update progress bar

}

@Override protected void done() { progressBar.setValue(0); // Reset progress bar

startButton.setEnabled(true); // Enable the button after the task is done

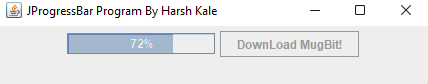
}

};

worker.execute();

}

}



// Programmer: Harsh Moreshwar Kale

// Created Date: 13/09/2023

// Question 3:

// Write a program using JProgressBar to show the progress of progressbar when user clicks on JButton.

import javax.swing.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class PracticalNo\_9Q3 {

private static JProgressBar progressBar;

private static JButton startButton;

private static JButton pauseButton;

private static SwingWorker<Void, Integer> worker;

public static void main(String[] args) {

SwingUtilities.invokeLater(() -> {

JFrame frame = new JFrame("Progress Bar with Start and Pause By Harsh Kale!");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setSize(300, 100);

// Create a JProgressBar

progressBar = new JProgressBar(0, 100);

progressBar.setStringPainted(true);

// Create a "Start" button

startButton = new JButton("Download Mugbit!");

startButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) { startProgress();

}

});

// Create a "Pause" button

pauseButton = new JButton("Pause");

pauseButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

pauseProgress();

}

});

JPanel panel = new JPanel();

panel.add(progressBar);

panel.add(startButton);

panel.add(pauseButton);

frame.add(panel);

frame.setVisible(true);

});

}

private static void startProgress() {

startButton.setEnabled(false); // Disable the "Start" button while the task is running

pauseButton.setEnabled(true); // Enable the "Pause" button

worker = new SwingWorker<Void, Integer>() {

@Override

protected Void doInBackground() throws Exception {

for (int i = 0; i <= 100; i++) {

if (isCancelled()) {

break; // Exit the loop if the task is cancelled

}

Thread.sleep(100); // Simulate work (100 milliseconds)

publish(i); // Publish progress

}

return null;

}

@Override

protected void process(java.util.List<Integer> chunks) {

int latestProgress = chunks.get(chunks.size() - 1);

progressBar.setValue(latestProgress); // Update progress bar

}

@Override

protected void done() {

progressBar.setValue(0); // Reset progress bar

startButton.setEnabled(true); // Enable the "Start" button

pauseButton.setEnabled(false); // Disable the "Pause" button

}

};

worker.execute();

}

private static void pauseProgress() { if (worker != null) {

worker.cancel(true); // Cancel the task

startButton.setEnabled(true); // Enable the "Start" button

pauseButton.setEnabled(false); // Disable the "Pause" button

}

}}

