**1)** Create an app using awt and perform reversing operation.

**Program:**

**import java.awt.event.ActionEvent;**

**import java.awt.event.ActionListener;**

**import javax.swing.JButton;**

**import javax.swing.JFrame;**

**import javax.swing.JLabel;**

**import javax.swing.JTextArea;**

**class ReverseNameAP**

**{**

**public static void main(String[] args)**

**{**

**JFrame frame = new JFrame();**

**JLabel jLabel = new JLabel("Enter Name :");**

**JTextArea area = new JTextArea();**

**JTextArea res = new JTextArea();**

**JButton button = new JButton("Reverse");**

**button.setBounds(150, 150, 100, 50);**

**area.setBounds(200, 100, 90, 40);**

**res.setBounds(150, 230, 100, 50);**

**jLabel.setBounds(120, 100, 100, 40);**

**frame.add(button);**

**frame.add(jLabel);**

**frame.add(area);**

**frame.add(res);**

**frame.setSize(400, 500);**

**frame.setLayout(null);**

**frame.setVisible(true);**

**button.addActionListener(new ActionListener(){**

**@Override**

**public void actionPerformed(ActionEvent e)**

**{**

**String str = area.getText();**

**String rev = " ";**

**for (int i = str.length() - 1; i>= 0; i--)**

**{**

**rev = rev + str.charAt(i);**

**res.setText(rev);**

**}**

**}**

**});**

**}**

**}**

**2)** Create dummy app using awt swing and perform concatenation operation.

**Program:**

**import java.awt.event.ActionEvent;**

**import java.awt.event.ActionListener;**

**import javax.swing.JButton;**

**import javax.swing.JFrame;**

**import javax.swing.JLabel;**

**import javax.swing.JTextArea;**

**class AwtConcatExample**

**{**

**public static void main(String[] args)**

**{**

**JFrame frame = new JFrame();**

**JLabel jLabel = new JLabel("Enter Text1 :");**

**JLabel jLabe2 = new JLabel("Enter Text2 :");**

**JLabel jLabe3 = new JLabel("Result:-");**

**JTextArea area1 = new JTextArea();**

**JTextArea area2 = new JTextArea();**

**JTextArea area3 = new JTextArea();**

**JButton button = new JButton("Concat");**

**button.setBounds(150, 300, 100, 40);**

**area1.setBounds(200, 100, 90, 30);**

**area2.setBounds(200, 150, 90, 30);**

**area3.setBounds(200, 200, 90, 30);**

**jLabel.setBounds(120, 95, 100, 40);**

**jLabe2.setBounds(120, 145, 100, 40);**

**jLabe3.setBounds(120, 195, 100, 40);**

**frame.add(button);**

**frame.add(jLabel);**

**frame.add(jLabe2);**

**frame.add(jLabe3);**

**frame.add(area1);**

**frame.add(area2);**

**frame.add(area3);**

**frame.setSize(400, 400);**

**frame.setLayout(null);**

**frame.setVisible(true);**

**button.addActionListener(new ActionListener() {**

**@Override**

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

**String str1 = area1.getText();**

**String str2 = area2.getText();**

**area3.setText(str1.concat(str2));**

**}**

**});**

**}**

**}**

**3)** Create an app using awt swing and convert lower text to upper and upper to lower?

**Program:**

**import java.awt.event.ActionEvent;**

**import java.awt.event.ActionListener;**

**import javax.swing.JButton;**

**import javax.swing.JFrame;**

**import javax.swing.JLabel;**

**import javax.swing.JTextArea;**

**class UpLow{**

**public static void main(String a[]){**

**JFrame f=new JFrame();**

**JLabel l1=new JLabel("Enter String:");**

**JLabel l2=new JLabel("Result:");**

**JTextArea t1=new JTextArea();**

**JTextArea t2=new JTextArea();**

**JButton b=new JButton("Lower/Upper");**

**b.setBounds(150,300,100,40);**

**t1.setBounds(200, 100, 90, 30);**

**t2.setBounds(200, 150, 90, 30);**

**l1.setBounds(120, 95, 100, 40);**

**l2.setBounds(120, 145, 100, 40);**

**f.add(b);**

**f.add(l1);**

**f.add(l2);**

**f.add(t1);**

**f.add(t2);**

**f.setSize(600,600);**

**f.setLayout(null);**

**f.setVisible(true);**

**b.addActionListener(new ActionListener(){**

**@Override**

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

**String str1=t1.getText();**

**StringBuffer sb = new StringBuffer(str1);**

**for(int i = 0; i < str1.length(); i++) {**

**//Checks for lower case character**

**if(Character.isLowerCase(str1.charAt(i))) {**

**//Convert it into upper case using toUpperCase() function**

**sb.setCharAt(i, Character.toUpperCase(str1.charAt(i)));**

**}**

**//Checks for upper case character**

**else if(Character.isUpperCase(str1.charAt(i))) {**

**//Convert it into upper case using toLowerCase() function**

**sb.setCharAt(i, Character.toLowerCase(str1.charAt(i)));**

**}**

**}**

**String str = sb.toString();**

**t2.setText(str);**

**}});**

**}**

**}**

**4)** Write a Java program to create three radio buttons. When any of them is selected, an appropriate message is displayed?(swings)

**Program:**

**import java.awt.\*;**

**import java.awt.event.\*;**

**import javax.swing.\*;**

**public class MainPage**

**{**

**public static void main(String[] args)**

**{**

**final JFrame frame = new JFrame("JRadioButton Demo");**

**// implement ItemListener interface**

**class MyItemListener implements ItemListener**

**{**

**public void itemStateChanged(ItemEvent ev)**

**{**

**boolean selected = (ev.getStateChange() == ItemEvent.SELECTED);**

**AbstractButton button = (AbstractButton) ev.getItemSelectable();**

**String command = button.getActionCommand();**

**// build message**

**String state;**

**if (selected)**

**{**

**state = "selected";**

**}**

**else**

**{**

**state = "unselected";**

**}**

**String message;**

**if (command.equals("Java"))**

**{**

**message = "The Java option has been " + state;**

**}**

**else if (command.equals("ASP"))**

**{**

**message = "The ASP.Net option has been " + state;**

**} else**

**{**

**message = "The SQL option has been " + state;**

**}**

**// show dialog**

**JOptionPane.showMessageDialog(frame, message);**

**}**

**}**

**// creates radio button and set corresponding action**

**// commands**

**JRadioButton rdbJava = new JRadioButton("Java");**

**rdbJava.setActionCommand("Java");**

**JRadioButton rdbASP = new JRadioButton("ASP.Net");**

**rdbASP.setActionCommand("ASP");**

**JRadioButton rdbSQL = new JRadioButton("SQL");**

**rdbSQL.setActionCommand("SQL");**

**// add event handler**

**MyItemListener myItemListener = new MyItemListener();**

**rdbJava.addItemListener(myItemListener);**

**rdbASP.addItemListener(myItemListener);**

**rdbSQL.addItemListener(myItemListener);**

**// add radio buttons to a ButtonGroup**

**final ButtonGroup group = new ButtonGroup();**

**group.add(rdbJava);**

**group.add(rdbASP);**

**group.add(rdbSQL);**

**// Frame setting**

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

**frame.setSize(300, 200);**

**Container cont = frame.getContentPane();**

**cont.setLayout(new GridLayout(0, 1));**

**cont.add(new JLabel("Please choose your favorite language: "));**

**cont.add(rdbJava);**

**cont.add(rdbASP);**

**cont.add(rdbSQL);**

**frame.setVisible(true);**

**}**

**}**