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ASSIGNMENT :- 6

SUBJECT :- JAVA ASSIGNMENT

BATCH:- S-5

Question 1:-

Code :-

```java
import javax.swing.*;

import java.awt.*;

import java.awt.event.*;

public class one {
    public static void main(String[] args) {
        // Create a JFrame and set its size and title
        JFrame frame = new JFrame();
        frame.setSize(400, 300);
        frame.setTitle("Menu Example");

        JMenuBar menuBar = new JMenuBar();
        frame.setJMenuBar(menuBar);

        JMenu menuA = new JMenu("Menu-A");
        menuBar.add(menuA);
```

```java
JMenuItem upItem = new JMenuItem("Up");
JMenuItem downItem = new JMenuItem("Down");
menuA.add(upItem);
menuA.add(downItem);

upItem.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        System.out.println("Up clicked");
    }
});
downItem.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        System.out.println("Down clicked");
    }
});

JMenu menuB = new JMenu("Menu-B");
menuBar.add(menuB);
```
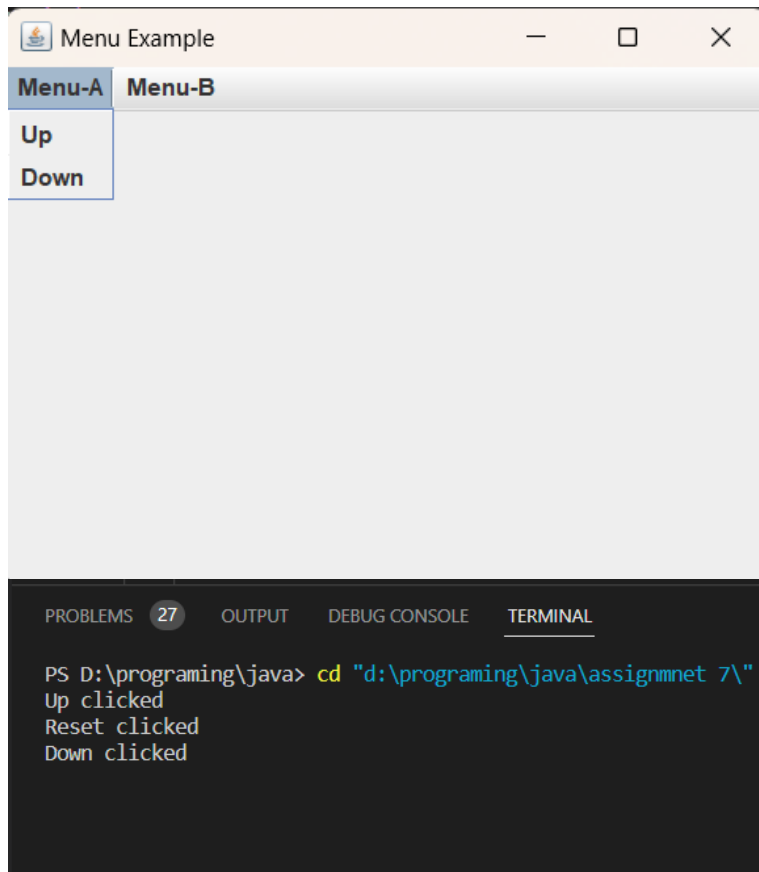
```java
        JMenuItem resetItem = new JMenuItem("Reset");
        menuB.add(resetItem);

        resetItem.addActionListener(new ActionListener()
{
            public void actionPerformed(ActionEvent e) {
                System.out.println("Reset clicked");
            }
        });

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

Question 2:-

Design a simple admission form using java gui.

CODE :-

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

import javax.swing.*;
class two{
```

```java
two(){
    JFrame main_window=new JFrame("Addmission Form", null);

    JTextField name_Input = new JTextField();
    JTextField ageInput=new JTextField();
    JTextField dateInput=new JTextField();

    String branches[]={"Computer Science","IT","Electronics","Electrical","Civil"};
    JComboBox BranchInput=new JComboBox(branches);

    JRadioButton male=new JRadioButton("Male");
    JRadioButton female=new JRadioButton("Female");

    ButtonGroup gen=new ButtonGroup();
    gen.add(male);
    gen.add(female);
```

```java
JButton submit = new JButton("Submit");

JLabel name_Label=new JLabel("Name :");
JLabel Title=new JLabel("ADDMISSON
FORM");
JLabel ageLabel=new JLabel("Age");
JLabel dateLabel=new JLabel("Date Of Birth : ");
JLabel BranchLabel=new JLabel("Select Branch
:");
JLabel GenderLabel = new JLabel("Select
Gender");

name_Label.setBounds(30,100,200,20);
Title.setBounds(300, 20, 700,50);
Title.setFont(new Font("Arial", Font.PLAIN, 30));
ageLabel.setBounds(30, 200, 200, 20);
dateLabel.setBounds(30, 300, 200, 20);
BranchLabel.setBounds(30, 400, 200, 20);
GenderLabel.setBounds(30,550,200,20);

name_Input.setBounds(100, 100, 200, 20);
ageInput.setBounds(100, 200, 200, 20);
```

```java
        dateInput.setBounds(150, 300, 200, 20);
        BranchInput.setBounds(150 , 400, 200, 20);

        male.setBounds(200, 550, 100, 20);
        male.addActionListener(e->{

        });
        female.setBounds(300, 550, 100, 20);
        female.addActionListener(e->{

        });

        submit.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e){
                System.out.println("Form Submited Successfully !");
                System.out.println("Name : "+name_Input.getText());
                System.out.println("Age : "+ageInput.getText());
                System.out.println("Date of Birth : "+dateInput.getText());
```

```java
        System.out.println("Branch  :
"+BranchInput.getSelectedItem());
        }
    });
    submit.setBounds(300, 600, 100, 50);

    main_window.add(Title);
    main_window.add(name_Label);
    main_window.add(ageLabel);
    main_window.add(BranchLabel);
    main_window.add(dateLabel);
    main_window.add(name_Input);
    main_window.add(ageInput);
    main_window.add(dateInput);
    main_window.add(BranchInput);
    main_window.add(male);
    main_window.add(female);
    main_window.add(submit);
    main_window.add(GenderLabel);

    main_window.setSize(1000, 800);
```

```java
        main_window.setLayout(null);
        main_window.setVisible(true);


    }
    public static void main(String[] args) {
        two obj = new two();
    }
}
```

Question 3:- Write a JAVA program to create login application(GUI). If login is successful then display user information else display message as "wrong username or password".

import javax.swing.*;

import java.awt.*;

import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;

class three {
    static String users[]={"Kaustubh","abc","def","xyz"};
    static String password[]={"123","456","789","101"};
    public static void main(String[] args) {
        JFrame Main_window=new JFrame();

```java
JTextField nameinput=new JTextField();
JLabel nameLabel=new JLabel("Enter user name:");

nameinput.setFont(new Font("Arial", 0, 20));
nameinput.setBounds(50, 50, 500, 30);
nameLabel.setFont(new Font("Arial", 0, 20));
nameLabel.setBounds(50, 20, 500, 30);

JTextField passinput=new JTextField();
JLabel passLabel=new JLabel("Enter Password:");
passinput.setFont(new Font("Arial", 0, 20));
passinput.setBounds(50, 130, 500, 30);
passLabel.setFont(new Font("Arial", 0, 20));
passLabel.setBounds(50, 100, 500, 30);

JTextArea msg=new JTextArea("Login Successful !");
msg.setBounds(70, 220, 500, 30);
msg.setFont(new Font("Arial", 0, 30));
```

```java
JButton submit=new JButton("Submit");
submit.setBounds(70, 180, 100, 40);

submit.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e){
        for(int i=0;i<4;i++){
            if(users[i].equals(nameinput.getText())){
if(password[i].equals(passinput.getText())){
                System.out.println("Login successful
!");
                Main_window.add(msg);
            }
        }
    }
}
});

Main_window.add(submit);

Main_window.add(passLabel);
Main_window.add(passinput);
```

```java
        Main_window.add(nameLabel);
        Main_window.add(nameinput);




        Main_window.setFont(new Font("Arial", 0, 50));
        Main_window.setFont(new Font("Arial", 0, 50));
        Main_window.setLayout(null);
        Main_window.setVisible(true);
        Main_window.setSize(1000, 800);

    }
}
```

Enter user name:
Kaustubh

Enter Password:
123

Submit
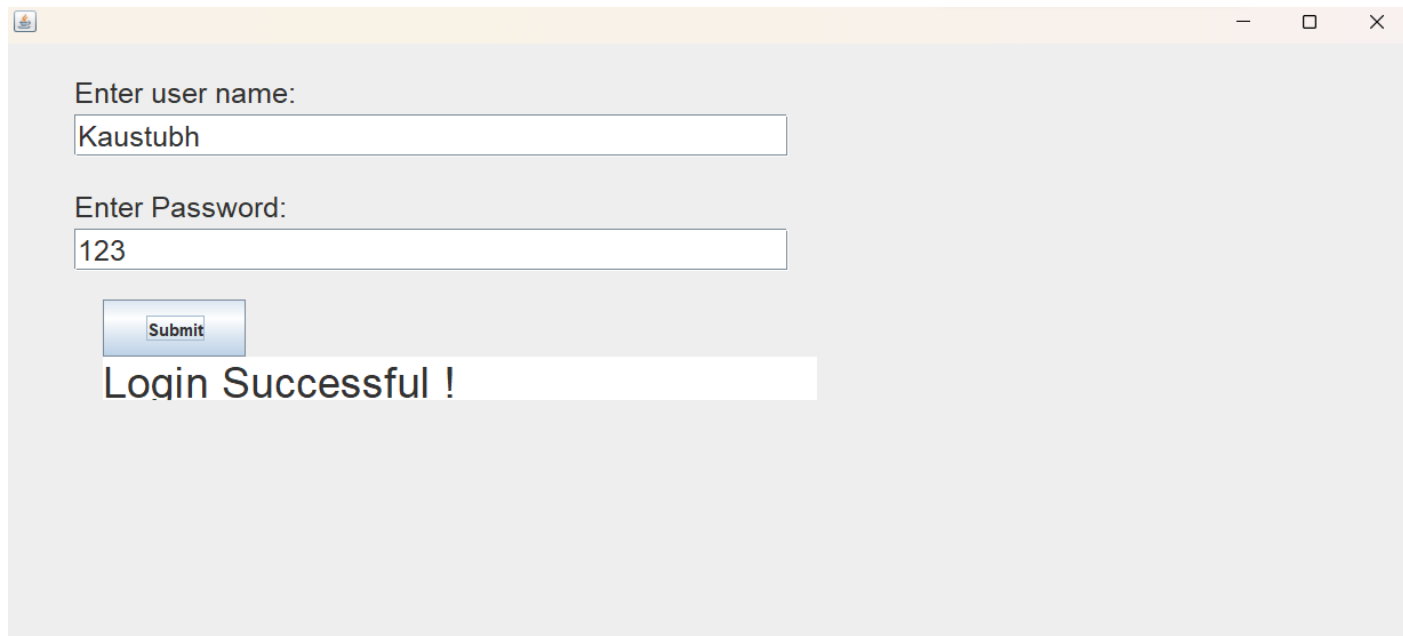
Login Successful !

Question 4:- Design a java application with various layout managers.

import javax.swing.*;

import java.awt.*;

class four {

   public static void main(String[] args) {

     //Flow layout

     JFrame frame = new JFrame();

```java
frame.setSize(400, 300);
frame.setTitle("FlowLayout Example");
JPanel panel = new JPanel();
panel.setLayout(new FlowLayout());
JLabel label1 = new JLabel("Label 1");
JLabel label2 = new JLabel("Label 2");
JLabel label3 = new JLabel("Label 3");
panel.add(label1);
panel.add(label2);
panel.add(label3);
frame.add(panel);
frame.setVisible(true);


//Border layout :-
JFrame Borderwindow = new JFrame();
Borderwindow.setSize(400, 300);
Borderwindow.setTitle("BorderLayout Example");
JPanel panel2 = new JPanel();
panel2.setLayout(new BorderLayout());
JButton button1 = new JButton("North");
```

```
JButton button2 = new JButton("South");
JButton button3 = new JButton("East");
JButton button4 = new JButton("West");
JButton button5 = new JButton("Center");
panel2.add(button1, BorderLayout.NORTH);
panel2.add(button2, BorderLayout.SOUTH);
panel2.add(button3, BorderLayout.EAST);
panel2.add(button4, BorderLayout.WEST);
panel2.add(button5, BorderLayout.CENTER);
Borderwindow.add(panel2);
Borderwindow.setVisible(true);

//Grid Layout :-
JFrame gridFrame = new JFrame();
gridFrame.setSize(400, 300);
gridFrame.setTitle("Grid Example");
JPanel gridPanel = new JPanel();

// Use a GridLayout with 2 rows and 3 columns for
the panel
gridPanel.setLayout(new GridLayout(2, 3));
```

```java
JButton Gbtn1 = new JButton("Button 1");
JButton Gbtn2 = new JButton("Button 2");
JButton Gbtn3 = new JButton("Button 3");
JButton Gbtn4 = new JButton("Button 4");
JButton Gbtn5 = new JButton("Button 5");
JButton Gbtn6 = new JButton("Button 6");
gridPanel.add(Gbtn1);
gridPanel.add(Gbtn2);
gridPanel.add(Gbtn3);
gridPanel.add(Gbtn4);
gridPanel.add(Gbtn5);
gridPanel.add(Gbtn6);

gridFrame.add(gridPanel);
gridFrame.setVisible(true);


//Box Layout :-
JFrame Bframe = new JFrame();
Bframe.setSize(400, 300);
```

```java
        Bframe.setTitle("BoxLayout Example");

        JPanel Bpanel = new JPanel();


        Bpanel.setLayout(new BoxLayout(Bpanel,
BoxLayout.Y_AXIS));


        JButton Bbtn1 = new JButton("Button 1");

        JButton Bbtn2 = new JButton("Button 2");

        JButton Bbtn3 = new JButton("Button 3");

        Bpanel.add(Bbtn1);

        Bpanel.add(Box.createRigidArea(new
Dimension(0, 10))); // Add some space between
components

        Bpanel.add(Bbtn2);

        Bpanel.add(Box.createRigidArea(new
Dimension(0, 10))); // Add some space between
components

        Bpanel.add(Bbtn3);

       Bframe.add(Bpanel);

       Bframe.setVisible(true);

    }
}
```

J four.java   X

FlowLayout Example   —   □   X

Label 1 Label 2 Label 3

BoxLayout Example   —   □   X

Button 1

Button 2

Button 3

```
15        panel.add(label1);
16        panel.add(label2);
17        panel.add(label3);
```

BorderLayout Example   —   □   X

North

West   Center   East

South

Grid Example   —   □   X

| Button 1 | Button 2 | Button 3 |
| Button 4 | Button 5 | Button 6 |