

Q - 1) Write a Java applet program which takes the name of user as input and displays a personalized greeting in the middle of applet window.

<<CODE>>

```
import java.applet.*;
import java.awt.*;
import java.awt.event.*;
public class pro1 extends Applet implements ActionListener
{
    String name="";
    String id="";
    TextField n1=new TextField("",20);
    TextField i1=new TextField("",20);
    Label l1=new Label("username:");
    Label l2=new Label("Id:");

    Button b1=new Button("OK");

    public void init()
    {
        add(l1);
        add(n1);
        add(l2);
        add(i1);
        add(b1);
        b1.addActionListener(this);
    }
    Font obj =new Font("arial",Font.BOLD,20);
    public void paint(Graphics g)
    {
        g.setFont(obj);
        g.drawString("Hello  "+name,50,50);
        g.drawString("Id:"+id,50,100);
    }
}
```

```
public void actionPerformed(ActionEvent e )
{
    name=n1.getText();
    id=i1.getText();
    repaint();
}

}
```

<<OUTPUT>>



Q-2) Write a Java applet program that allows user to select a color from drop-down list and then changes the background color of applet window accordingly.

<<CODE>>

```
import java.applet.*;
import java.awt.*;
import java.awt.event.*;
```

```
public class bgcolor extends Applet implements ItemListener {

    Choice c1;

    public void init() {
        c1 = new Choice();
        c1.add("Red");
        c1.add("Yellow");
        c1.add("Blue");
        c1.add("Green");
        c1.add("Brown");
        c1.add("Pink");
        c1.addItemListener(this);
        add(c1);
    }

    public void itemStateChanged(ItemEvent e) {
        String colorString = c1.getSelectedItem();
        Color color = null;
        switch(colorString) {
            case "Red":
                color = Color.RED;
                break;
            case "Green":
                color = Color.GREEN;
                break;
            case "Blue":
                color = Color.BLUE;
                break;
            case "Yellow":
                color = Color.YELLOW;
                break;
            case "Brown":
                color = Color.RED;
                break;
            case "Pink":
                color = Color.RED;
                break;
        }
    }
}
```

```

        default:
            color = Color.WHITE;
        }
        setBackground(color);
    }
}

```

<<OUTPUT>>



Q-3) Write a Java applet program that displays a calculator with basic arithmetic operations (addition, subtraction, multiplication, division). The user should be able to input the numbers using buttons and result should be displayed in the text field.

<<CODE>>

```

import java.applet.*;
import java.awt.*;
import java.awt.event.*;
public class pro3 extends Applet implements ActionListener {

    TextField t1=new TextField(20);

```

```
    TextField t2=new TextField(20);
    TextField t3=new TextField(20);

    Label l1=new Label("num 1");
    Label l2=new Label("num 2");
    Label l3=new Label("ans");
    Button b1= new Button("+");
    Button b2= new Button("-");
    Button b3= new Button("*");
    Button b4= new Button("/");

    public void init()
    {

        add(l1);
        add(t1);
        add(l2);
        add(t2);

        add(b1);
        add(b2);
        add(b3);
        add(b4);
        add(l3);
        add(t3);
        b1.addActionListener(this);
        b2.addActionListener(this);
        b3.addActionListener(this);
        b1.addActionListener(this);
        b4.addActionListener(this);
    }

    public void actionPerformed(ActionEvent e)
    {
        int num1=Integer.parseInt(t1.getText());
        int num2=Integer.parseInt(t2.getText());
        String ans="";
        int num3;
```

```
        if(e.getSource()==b1) {
            num3=num1+num2;
            ans=String.valueOf(num3);
            t3.setText(ans);
        }
        else if(e.getSource()==b2) {
            num3=num1-num2;
            ans=String.valueOf(num3);
            t3.setText(ans);
        }
        else if(e.getSource()==b3) {
            num3=num1*num2;
            ans=String.valueOf(num3);
            t3.setText(ans);
        }
        else{
            float n4=(float) num1/num2;
            ans=String.valueOf(n4);
            t3.setText(ans);
        }
    }
}
```

<<OUTPUT>>

Applet

num 1

15

num 2

20

+

-

*

/

ans

300