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Lab-4

Que-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.

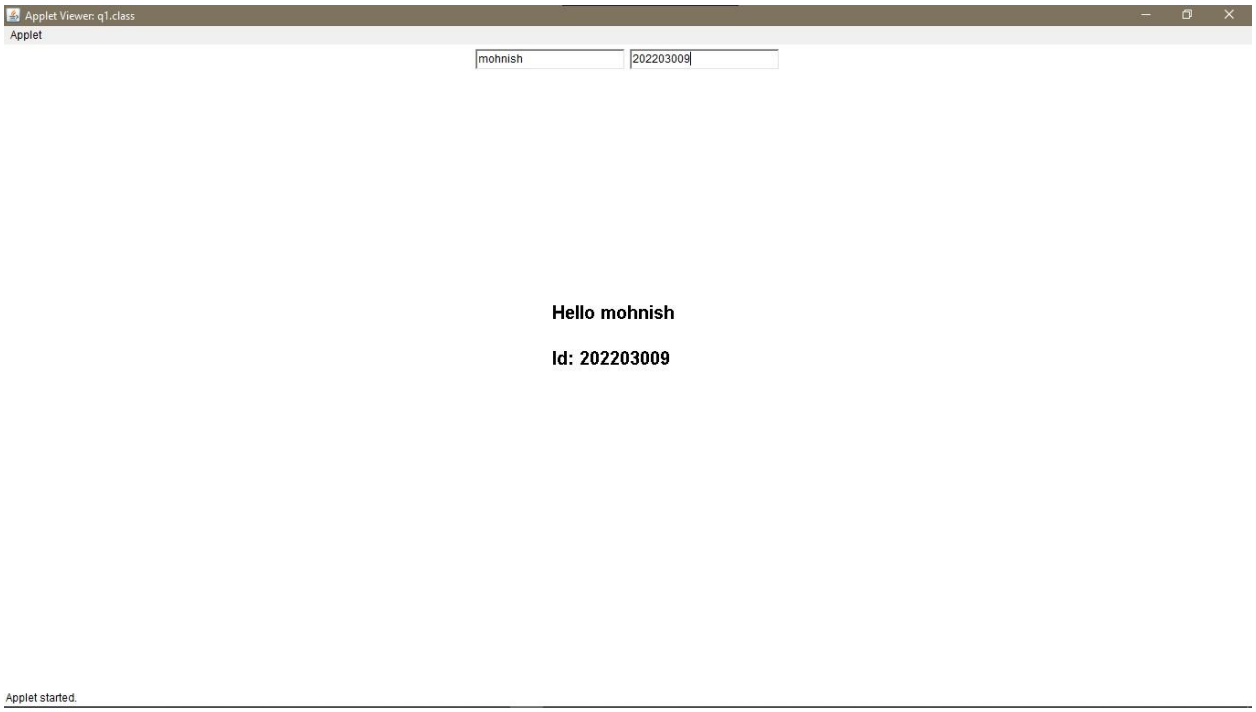
Applet CODE:

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

public class q1 extends Applet {
  TextField nameField,id;

  public void init() {
    nameField = new TextField(20);
        id = new TextField(20);
    add(nameField);
        add(id);
    setSize(300, 200);
  }

  public void paint(Graphics g) {
        Font font = new Font("Arial", Font.BOLD, 20);
    g.setFont(font);
    String name = nameField.getText();
        String Id=id.getText();
    String name1 = "Hello "+name;
        String Id1="Id: "+Id;
    g.drawString(name1,600,300);
        g.drawString(Id1,600,350);
  }
}
```

Html CODE:

```
<html>
<body>
<applet code="q1.class",height="300",width="300">
</applet>
</body>
</html>
```

Output:



Que-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.

Applet CODE:

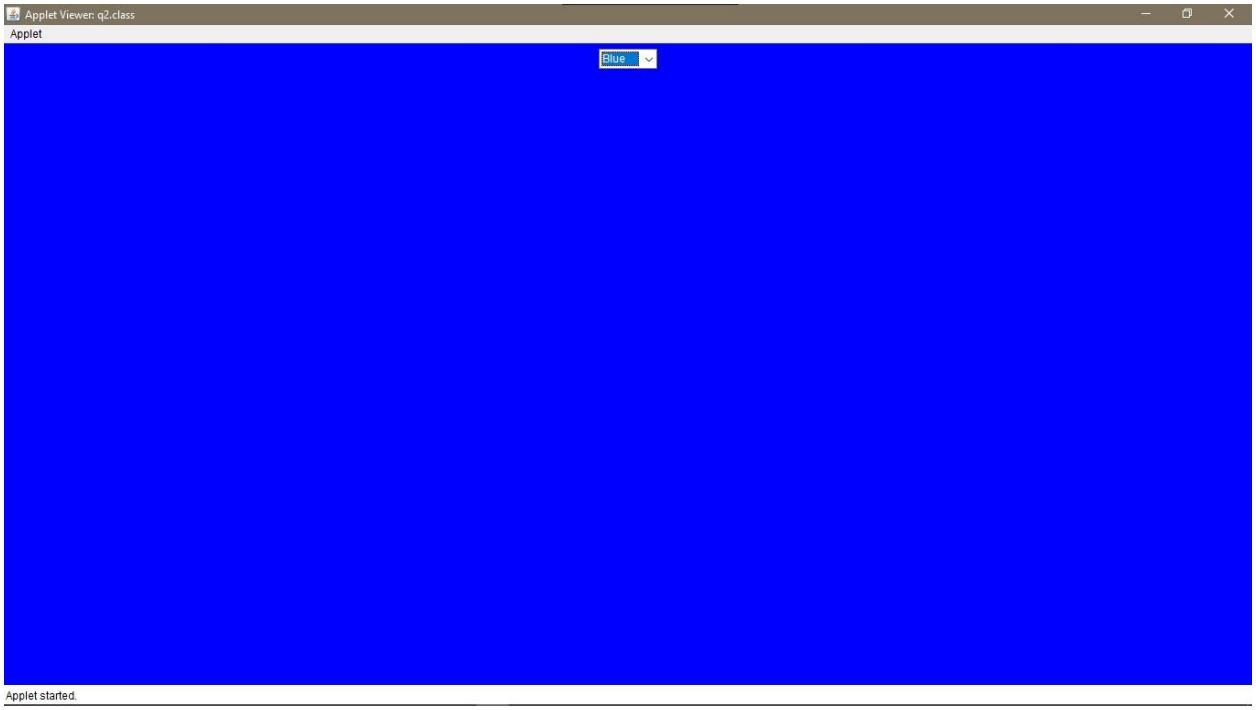
```
import java.applet.*;
import java.awt.*;
import java.awt.event.*;


public class q2 extends Applet implements ItemListener {

   Choice colorChoice;

   public void init() {
      colorChoice = new Choice();
      colorChoice.add("Red");
      colorChoice.add("Yellow");
      colorChoice.add("Blue");
                  colorChoice.add("Green");
      colorChoice.addItemListener(this);
      add(colorChoice);
```

```
    }

    public void itemStateChanged(ItemEvent e) {
        String colorString = colorChoice.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;
            default:
                color = Color.WHITE;
        }
        setBackground(color);
    }
}
```

Html CODE:

```
<html>
<body>
<applet code="q2.class",height="300",width="300">
</applet>
</body>
</html>
```

Output:



Que-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.

Applet CODE:

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


public class q3 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("Add");
Button b2= new Button("Sub");
Button b3= new Button("Multi");
Button b4= new Button("Div");
```

```
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 n1=Integer.parseInt(t1.getText());
int n2=Integer.parseInt(t2.getText());
String ans="";
int n3;
if(e.getSource()==b1) {



                n3=n1+n2;
                ans=String.valueOf(n3);
               t3.setText(ans);
              }
else if(e.getSource()==b2) {

                n3=n1-n2;
                ans=String.valueOf(n3);
               t3.setText(ans);
              }
else if(e.getSource()==b3) {

                n3=n1*n2;
                 ans=String.valueOf(n3);
               t3.setText(ans);
```

```
            }
          else{

               float n4=(float)n1/n2;
                ans=String.valueOf(n4);
              t3.setText(ans);
       }

}
}
```

Html CODE:

```
<html>
<body>
<applet code="q3.class",height="300",width="300">
</applet>
</body>
</html>
```

Output: