20MCA132 OBJECT ORIENTED PROGRAMMING LAB

CO5 CLASS 2

SUBMITTED BY

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Course Outcome5 (CO5)

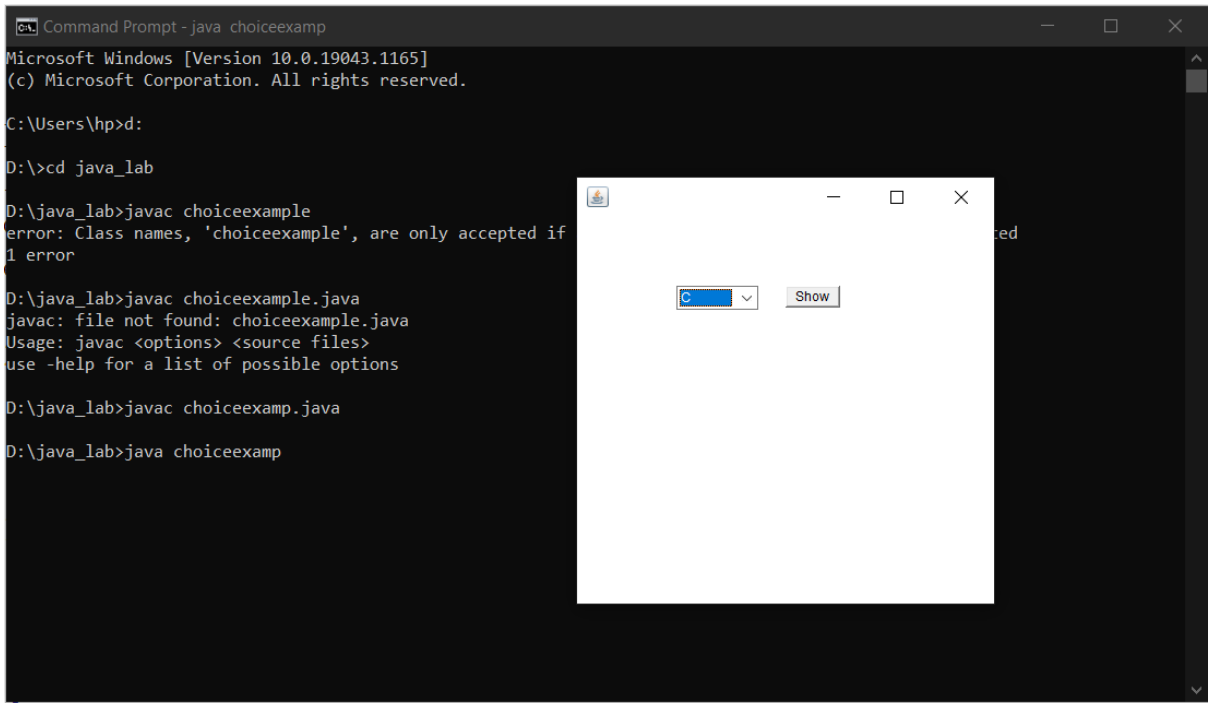
1.Choice component example

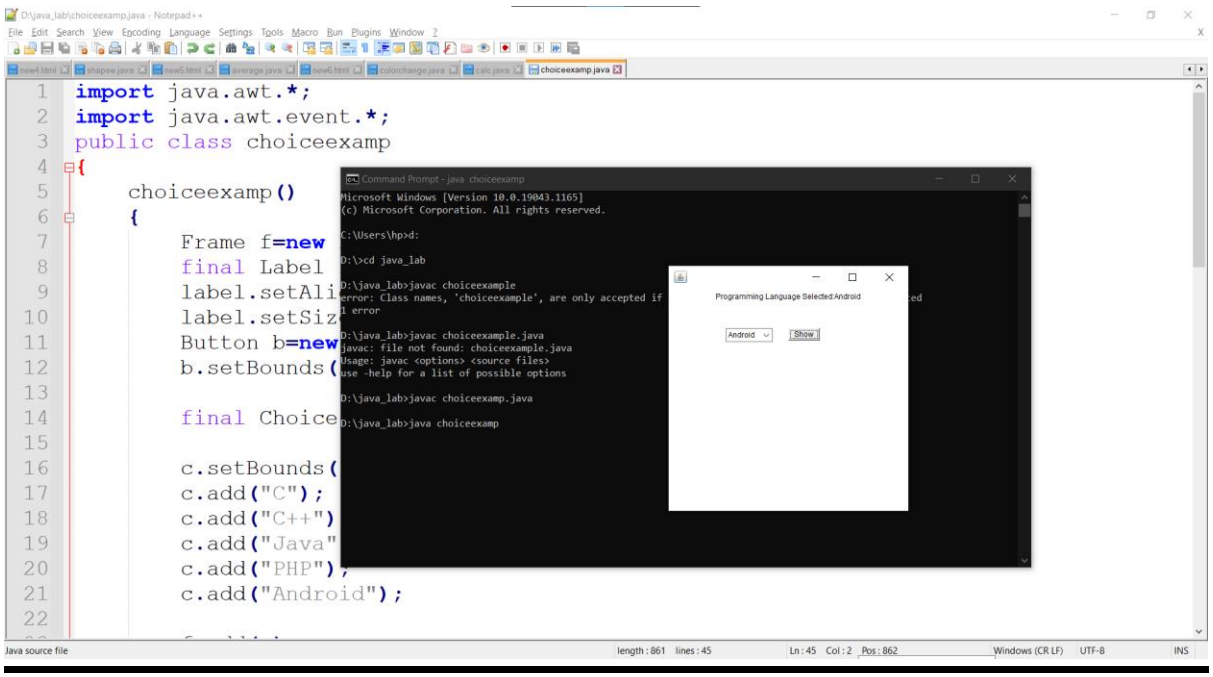
PROGRAM

```
import java.awt.*;
import java.awt.event.*;
public class choiceexamp
{
        choiceexamp()
        {
                Frame f=new Frame();
                final Label label=new Label();
                label.setAlignment(Label.CENTER);
                label.setSize(400,100);
                Button b=new Button("Show");
                b.setBounds(200,100,50,20);

                final Choice c=new Choice();

                c.setBounds(100,100,75,75);
                c.add("C");
                c.add("C++");
                c.add("Java");
                c.add("PHP");
                c.add("Android");

                f.add(c);
                f.add(label);
                f.add(b);
```

```
		f.setSize(400,400);
		f.setLayout(null);
		f.setVisible(true);

		b.addActionListener(new ActionListener()
		{
			public void actionPerformed(ActionEvent e)
			{
				String data="Programming Language Selected:"+c.getItem(c.getSelectedIndex());
				label.setText(data);
			}
		});
	}
	public static void main(String args[])
		{
			new choiceexamp();
		}

}
```

OUTPUT


Command Prompt - java choiceexamp
Microsoft Windows [Version 10.0.19043.1165]
(c) Microsoft Corporation. All rights reserved.
C:\Users\hp>d:
D:\>cd java_lab
D:\java_lab>javac choiceexample
error: Class names, 'choiceexample', are only accepted if
1 error
D:\java_lab>javac choiceexample.java
javac: file not found: choiceexample.java
Usage: javac <options> <source files>
use -help for a list of possible options
D:\java_lab>javac choiceexamp.java
D:\java_lab>java choiceexamp
C
Show


D:\java_lab\choiceexamp.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
choiceexamp.java
1 import java.awt.*;
2 import java.awt.event.*;
3 public class choiceexamp
4 {
5 choiceexamp()
6 {
7 Frame f=new
8 final Label
9 label.setAli
10 label.setSiz
11 Button b=new
12 b.setBounds(
13
14 final Choice
15
16 c.setBounds(
17 c.add("C");
18 c.add("C++")
19 c.add("Java"
20 c.add("PHP");
21 c.add("Android");
22
Java source file
length : 861 lines : 45
Ln : 45 Col : 2 Pos : 862
Windows (CR LF) UTF-8 INS

2. Implement a simple calculator using AWT components(question5)

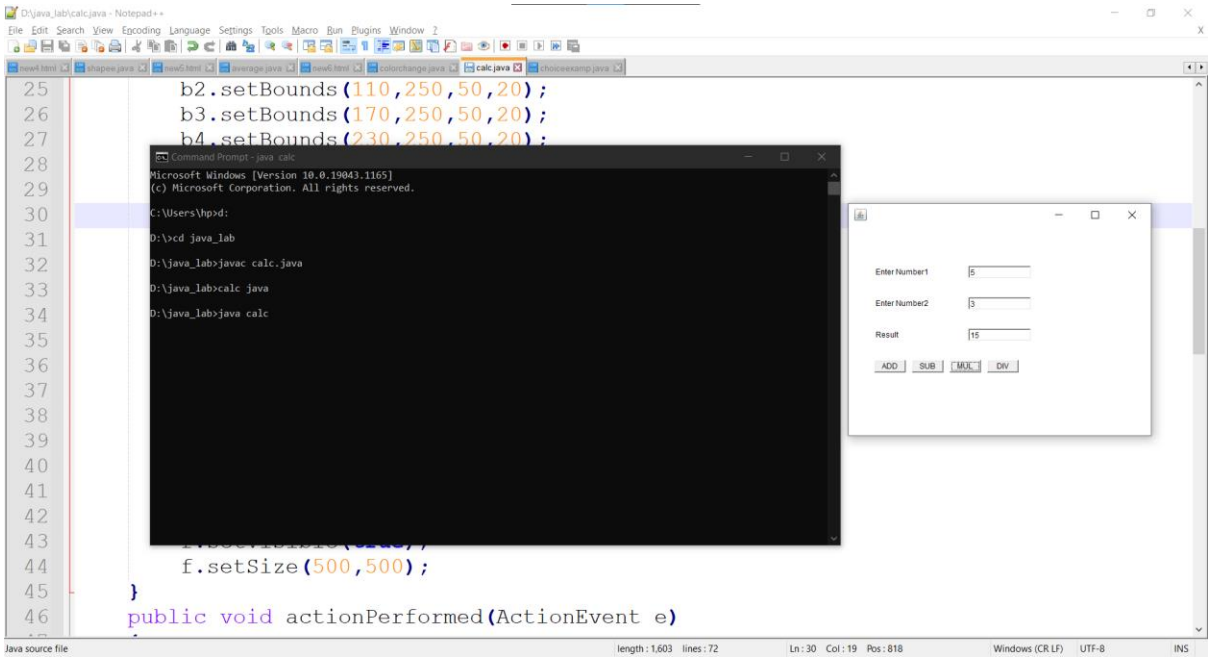
PROGRAM

```
import java.awt.*;
import java.awt.event.*;
class calc implements ActionListener
{
        Frame f=new Frame();
        Label l1=new Label("Enter Number1");
        Label l2= new Label("Enter Number2");
        Label l3=new Label("Result");
        TextField t1=new TextField();
        TextField t2=new TextField();
        TextField t3=new TextField();
        Button b1=new Button("ADD");
        Button b2=new Button("SUB");
        Button b3=new Button("MUL");
        Button b4=new Button("DIV");
        calc()
        {
                l1.setBounds(50,100,100,20);
                l2.setBounds(50,150,100,20);
                l3.setBounds(50,200,100,20);
                t1.setBounds(200,100,100,20);
                t2.setBounds(200,150,100,20);
                t3.setBounds(200,200,100,20);
                b1.setBounds(50,250,50,20);
                b2.setBounds(110,250,50,20);
                b3.setBounds(170,250,50,20);
                b4.setBounds(230,250,50,20);
                f.add(l1);
```

```
        f.add(l2);
        f.add(l3);
        f.add(t1);
        f.add(t2);
        f.add(t3);
        f.add(b1);
        f.add(b2);
        f.add(b3);
        f.add(b4);
        b1.addActionListener(this);
        b2.addActionListener(this);
        b3.addActionListener(this);
        b4.addActionListener(this);
        f.setLayout(null);
        f.setVisible(true);
        f.setSize(500,500);
}
public void actionPerformed(ActionEvent e)
{
        int i=Integer.parseInt(t1.getText());
        int j=Integer.parseInt(t2.getText());
        if(e.getSource()==b1)
        {
                t3.setText(String.valueOf(i+j));
        }
        if(e.getSource()==b2)
        {
                t3.setText(String.valueOf(i-j));
        }
        if(e.getSource()==b3)
```

```
            {
                t3.setText(String.valueOf(i*j));
            }
            if(e.getSource()==b4)
            {
                t3.setText(String.valueOf(i/j));
            }
        }
        public static void main(String args[])
        {
            new calc();
        }
}
```

OUTPUT



3. On mouse click event,
change the color of the text color change

PROGRAM

```
import java.applet.*;
import java.awt.*;
import java.awt.event.*;
import java.util.*;
public class colchange extends Applet implements MouseListener, Runnable
{
private Color textColor = Color.BLACK;

public void paint(Graphics g)
{
g.setColor(Color.black);
g.drawOval(20,20,140,140);
g.setColor(Color.pink);
g.fillOval(20,20,140,140);
g.setColor(Color.black);
g.setColor(textColor);
g.setFont(new Font("SanSerif",Font.BOLD,25));
g.drawString("JAVA",60,95);
}
public void init()
{
this.setSize(200,200);
addMouseListener(this);
}
public void run()
{
while(true)
{
repaint();
```

```
try{
Thread.sleep(17);
}catch(InterruptedException e){
e.printStackTrace();
}
}
}
public void mouseClicked(MouseEvent e)
{
int x=e.getX(), y=e.getY();
if(x>=60 && x<=120 && y>=80 && y<=95)
textColor=Color.RED;
else
textColor=Color.BLACK;
repaint();
System.out.println("Mouse Position : x= "+x+" y= "+y);
}
public void mousePressed(MouseEvent e){}
public void mouseReleased(MouseEvent e){}
public void mouseEntered(MouseEvent e){}
public void mouseExited(MouseEvent e){}
}
```

Html

```
<html>
    <head>
    </head>
    <body>
        <div align="center">
            <applet code="colchange.class" height="500" width="800">
            </applet>
```

```
        </div>
    </body>
</html>
```

OUTPUT