

practical - 6

- Q. Create a swing application that randomly changes color on button click.

Code -

```

import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.Random;

public class ChangeColor extends JFrame
{
    private JPanel colorPanel;
    private JButton changeColor;

    public ChangeColor()
    {
        setTitle("Random color changer");
        setSize(300, 200);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLayout(new BorderLayout());
        colorPanel = new JPanel();
        changeColor = new JButton("change color");
        add(colorPanel, BorderLayout.CENTER);
        add(changeColor, BorderLayout.SOUTH);
        changeColor.addActionListener(new ActionListener()
        {
            public void actionPerformed(ActionEvent e)
            {

```

```
changeColor();
```

```
}  
}  
}  
}
```

```
private void changeColor()  
{
```

```
Random random = new Random();
```

```
Color randomColor = new Color(random.nextInt(256),  
Color randomColor = new Color(random.nextInt(256), random.nextInt(256));  
colorPanel.setBackground(randomColor);
```

```
}  
public static void main (String [] args)  
{
```

```
SwingUtilities.invokeLater(() -> {
```

```
changeColor app = new changeColor();
```

```
app.setVisible(true);
```

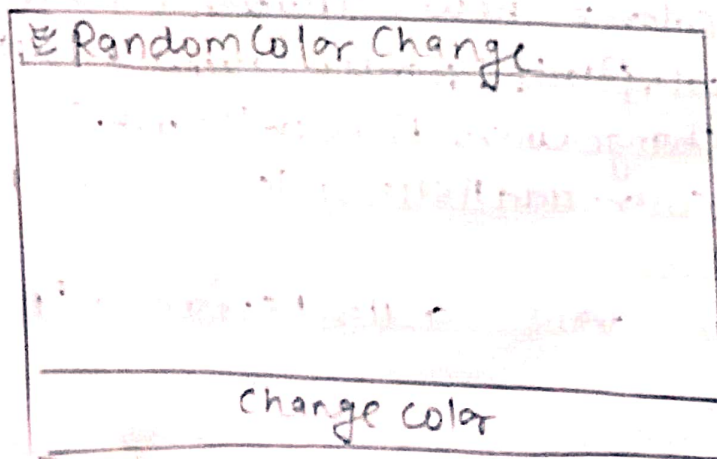
```
});
```

```
}  
}
```

Output-

```
C:\java au > javac ChangeColor.java
```

```
C:\java au > java ChangeColor
```



6. Create a Swing application to demonstrate use of ~~TextArea~~ ^{change its color} using scrollpane to show content of ~~text file~~ in the ~~textarea~~ selected using ~~file chooser~~ color chooser

Code -

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

public class ColorChange extends JFrame
{
    private JScrollPane scrollpane = new JScrollPane();
    private JButton changeColor = new JButton("change color");

    public ColorChange()
    {
        setTitle("ScrollPane Color Change");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLayout(new BorderLayout());
        add(scrollpane, BorderLayout.CENTER);
        add(changeColor, BorderLayout.SOUTH);
        changeColor.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e)
            {
                Color selectedColor = JColorChooser.showDialog(null,
                    "Choose color", scrollpane.getBackground());
                if (selectedColor != null)
                {

```

```

scrollpane.setViewport().setBackground(selectedColor);
}
}
}
}
}

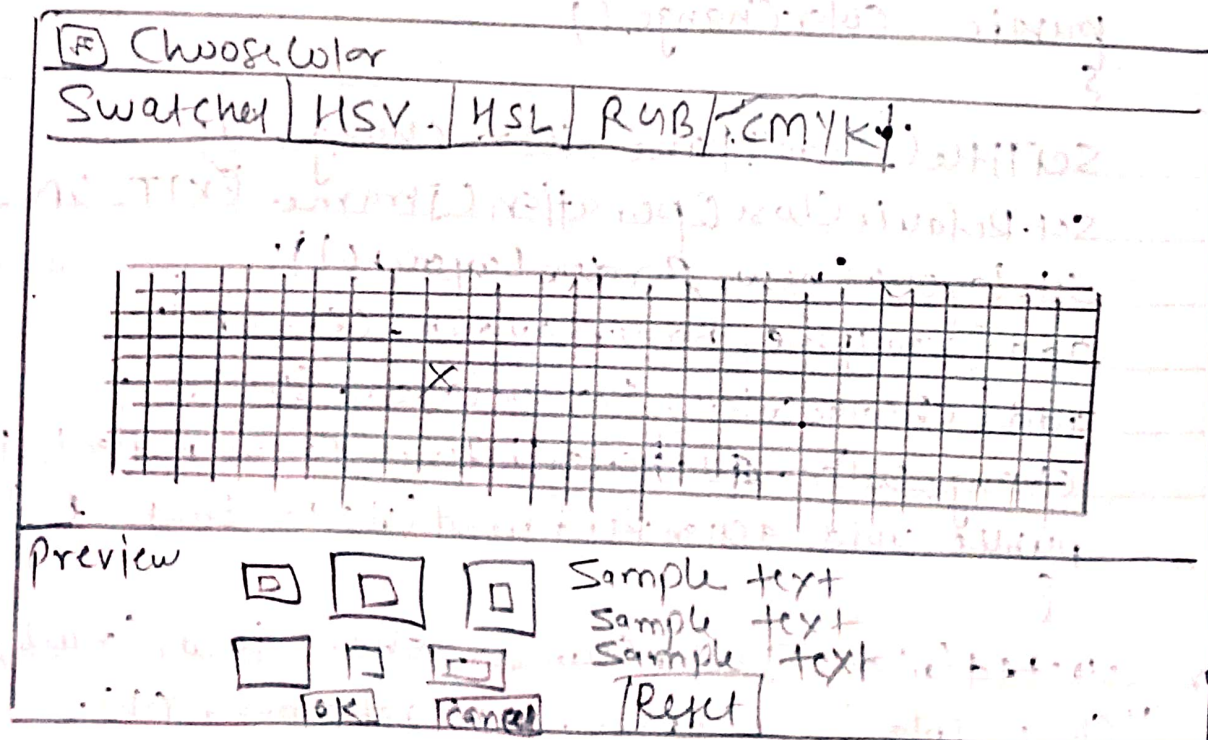
public static void main(String[] args)
{
    SwingUtilities.invokeLater(() -> {
        new ColorChange().setVisible(true);
    });
}
}
}

```

Output -

C:\java> javac ColorChange.java

C:\java> java ColorChange



- b. Create a swing application to demonstrate use of Text Area using scroll pane to show content of text file in text area selected using file chooser

Code -

```

import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.BufferedReader;
import java.io.FileReader;
import java.io.IOException;

public class ShowFileInTextArea extends
    JFrame
{
    private JTextArea textArea = new JTextArea(20, 40);
    private JButton openFileButton = new JButton("Open file");
    public ShowFileInTextArea()
    {
        setTitle("File Viewer");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLayout(new BorderLayout());
        JScrollPane scrollPane = new JScrollPane(textArea);
        add(scrollPane, BorderLayout.CENTER);
        add(openFileButton, BorderLayout.SOUTH);
        openFileButton.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e)
            {
                openFile();
            }
        });
    }
}

```



```

pack();
setLocationRelativeTo(null);
}
private void openFile()
{
    JFileChooser fileCh = new JFileChooser();
    int result = fileCh.showOpenDialog(this);
    if (result == JFileChooser.APPROVE_OPTION)
    {
        try (BufferedReader reader = new BufferedReader(new
        FileReader (fileCh.getSelectedFile())))
        {
            StringBuilder con = new StringBuilder();
            String line;
            while ((line = reader.readLine()) != null)
            {
                con.append(line).append("\n");
            }
            textArea.setLineWrap(true);
            textArea.setText(con.toString());
        }
        catch (IOException e)
        {
            JOptionPane.showMessageDialog(this, "Error reading the file",
            "Error", JOptionPane.ERROR_MESSAGE);
        }
    }
}

public static void main (String[] args)
{
    SwingUtilities.invokeLater(() -> {
        new ShowFileInTextArea().setVisible(true);
    });
}

```

Output-

C:\java all > javac ShowFileInTextArea.java

C:\java all > java ShowFileInTextArea

File Viewer



Open File

Open

Look In:

Documents



addpro raj



Angular JS(12)

<

>

File Name: