PRACTICAL 7

Aim: Create an application that will display the list of color name in ListView. On click of any of the color name, change the background color of an Activity.

Code:
JAVA FILE: (MainActivity.java)
```java
package com.example.practical7;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
    private ListView colorListView;
    private String[] colorNames = {
        "Red", "Green", "Blue", "Yellow", "Pink", "Cyan", "White"
    };
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        colorListView = findViewById(R.id.colorListView);
        ArrayAdapter<String> adapter = new ArrayAdapter<>(this, R.layout.color_list,
colorNames);
        colorListView.setAdapter(adapter);
        colorListView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
                String selectedColor = colorNames[position];
                changeBackgroundColor(selectedColor);
            }
        });
    }
    private void changeBackgroundColor(String colorName) {
        int color = Color.WHITE; // Default color
        switch (colorName) {
            case "Red":
                color = Color.RED;
```

```java
                break;
            case "Green":
                color = Color.GREEN;
                break;
            case "Blue":
                color = Color.BLUE;
                break;
            case "Yellow":
                color = Color.YELLOW;
                break;
            case "Orange":
                color = Color.parseColor("#FFA500"); // Orange color code
                break;
            case "Purple":
                color = Color.parseColor("#800080"); // Purple color code
                break;
            case "Pink":
                color = Color.parseColor("#FFC0CB"); // Pink color code
                break;
            case "Cyan":
                color = Color.CYAN;
                break;
        }
        findViewById(android.R.id.content).setBackgroundColor(color);
    }
}
```

XML FILE: (activity_main.xml)

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
<TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:text=" Name: Angat Shah \n Enrollment No: 202203103510097 \n Branch:
B.Tech CSE"
        app:layout_constraintEnd_toEndOf="parent"
```

```
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:ignore="MissingConstraints" />
    <ListView
        android:id="@+id/colorListView"
        android:layout_width="100dp"
        android:layout_height="455dp"
        android:divider="#00000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.495"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.671" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Output: