**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)**

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*;

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 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"

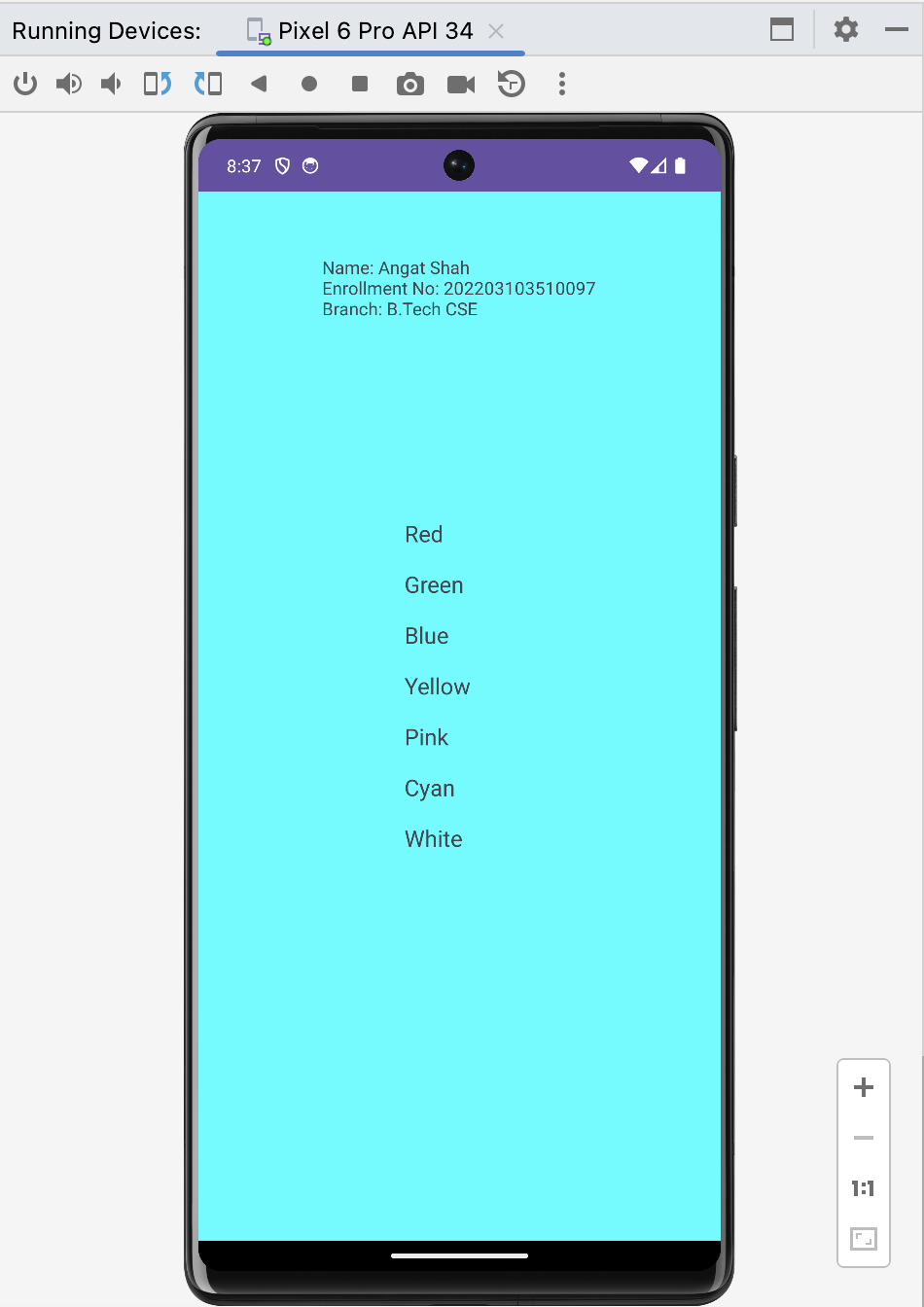
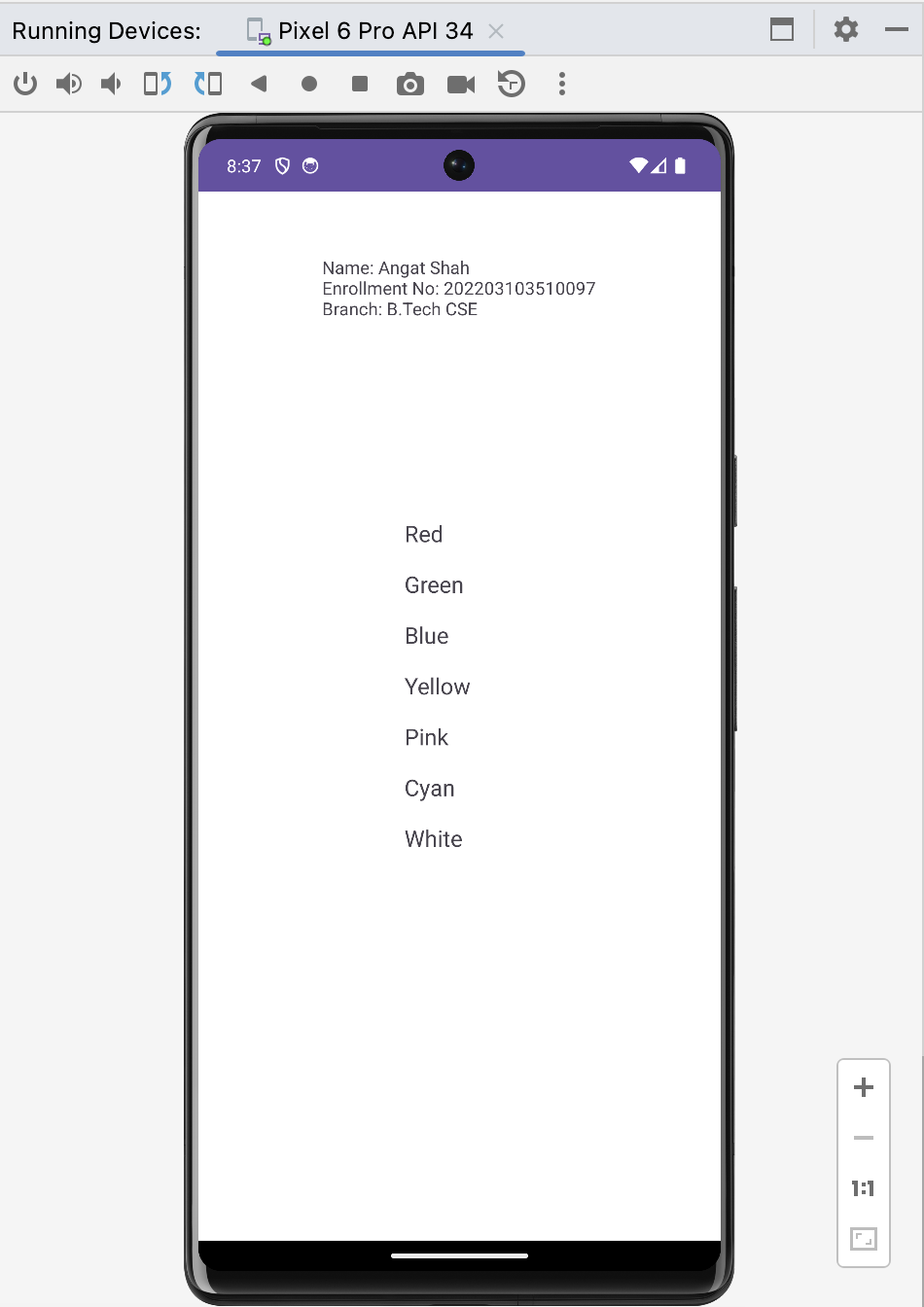
app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.671" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Output:**

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