Q: 7) Create an application with three option buttons, on selecting a button colour of the screen will change.

```java
package com.example.button_color;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {

    Button b1,b2,b3;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1 = findViewById(R.id.button);
        b2 = findViewById(R.id.button2);
        b3 = findViewById(R.id.button3);

        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

findViewById(R.id.clr).setBackgroundColor(getResources().getColor(R.color.black));
            }
        });

        b2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

findViewById(R.id.clr).setBackgroundColor(getResources().getColor(R.color.purple_200));
            }
        });

        b3.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

findViewById(R.id.clr).setBackgroundColor(getResources().getColor(R.color.white));
            }
        });
    }
}


<?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:id="@+id/clr"
    android:layout_width="match_parent"
```

```xml
        android:layout_height="match_parent"
        android:background="#F44336"
        tools:context=".MainActivity">

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Red"
        app:layout_constraintBottom_toTopOf="@+id/button2"
        app:layout_constraintEnd_toStartOf="@+id/button2"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Blue"
        app:layout_constraintBottom_toTopOf="@+id/button3"
        app:layout_constraintEnd_toStartOf="@+id/button3"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toEndOf="@+id/button"
        app:layout_constraintTop_toBottomOf="@+id/button" />

    <Button
        android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Green"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toEndOf="@+id/button2"
        app:layout_constraintTop_toBottomOf="@+id/button2" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

Button_3

RED

BLUE

PINK