

XML Code:

```
<?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:layout_width="235dp"
        android:layout_height="49dp"
        android:background="#FFFFFF"
        android:text="@string/color_changing"
        android:textAlignment="center"
        android:textColor="@color/black"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.1"
        android:gravity="center_horizontal" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/red"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.3"
        app:layout_constraintHorizontal_bias="0.5"
        />

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/blue"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.5"
        app:layout_constraintHorizontal_bias="0.5"
        />

    <Button
        android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/green"
        app:layout_constraintBottom_toBottomOf="parent"
```

```

        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.7"
        app:layout_constraintHorizontal_bias="0.5"
    />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Main activity JAVA:

```

package com.example.sharedpreference;

import androidx.appcompat.app.AppCompatActivity;
import androidx.constraintlayout.solver.state.State;
import androidx.constraintlayout.widget.ConstraintLayout;

import android.content.SharedPreferences;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    Button red,blue,green;
    ConstraintLayout layout;
    SharedPreferences sharedPreferences;
    SharedPreferences.Editor editor;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        red = findViewById(R.id.button);
        blue = findViewById(R.id.button2);
        green = findViewById(R.id.button3);
        layout = findViewById(R.id.cl);
        layout.setBackgroundColor(getColor());

        red.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                setcolor(getResources().getColor(R.color.red));
                layout.setBackgroundColor(getResources().getColor(R.color.red));
            }
        });

        green.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                setcolor(getResources().getColor(R.color.green));
                layout.setBackgroundColor(getResources().getColor(R.color.green));
            }
        });

        blue.setOnClickListener(new View.OnClickListener() {
            @Override

```

```

        public void onClick(View v) {
            setcolor(getResources().getColor(R.color.blue));
            layout.setBackgroundColor(getResources().getColor(R.color.blue));
        }

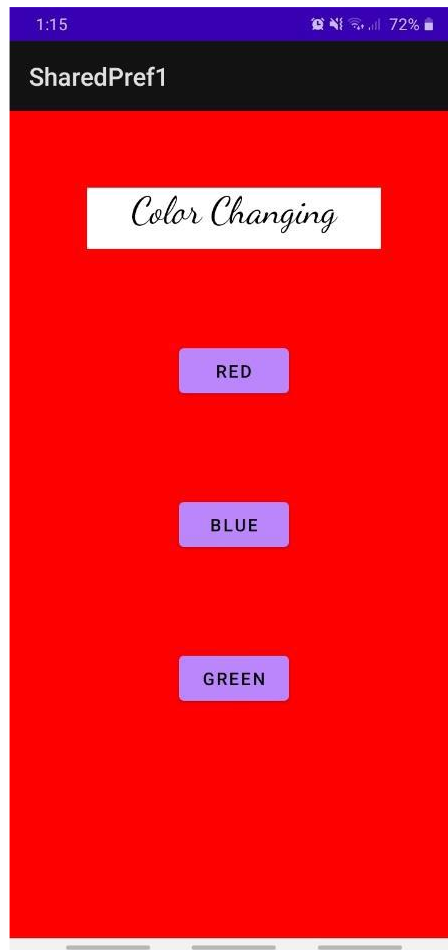
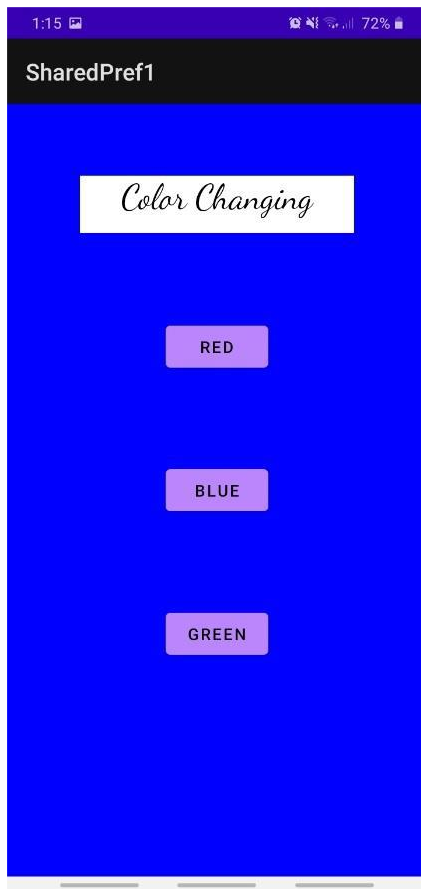
    }

    private void setcolor(int color) {
        sharedPreferences = getSharedPreferences("myPreference",MODE_PRIVATE);
        editor = sharedPreferences.edit();
        editor.putInt("colorkey",color);
        editor.apply();
    }

    private int getColor() {
        int color = 0;
        sharedPreferences = getSharedPreferences("myPreference",MODE_PRIVATE);
        color=sharedPreferences.getInt("colorkey",0);
        return color;
    }
}

```

OUTPUT:



1:15

72%

SharedPref1

Color Changing

RED

BLUE

GREEN