

Program No:	10
Roll No :	1545
Title of Program :	Radio button
Objective :	Design application in Android using Radio Button to change the background color.

### What is radio button?

A radio button is a graphical user interface element that allows a user to select one option from a predefined set of options. A radio group is a container that holds a collection of radio buttons. When one radio button within a radio group is selected, any previously selected radio button in that group is automatically deselected

### What is radio group?

RadioGroup is a widget in android which is used to handle multiple radio buttons within the android application. We can add multiple radio buttons to our RadioGroup. We have seen how to use radio buttons in android. In this article, we will take a look at How to implement Radio Group in the android application.

### Source Code:

#### activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/rootLayout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="24dp"
    android:gravity="center"
    android:background="#FFFFFF">

    <RadioGroup
        android:id="@+id/radioGroup"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="vertical">

        <RadioButton
            android:id="@+id/radioRed"
            android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:text="Red" />

        <RadioButton
            android:id="@+id/radioGreen"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Green" />

        <RadioButton
            android:id="@+id/radioBlue"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Blue" />
    </RadioGroup>

</LinearLayout>
```

## MainActivity.java

```
package com.example.spinnercomp;

import android.graphics.Color;
import android.os.Bundle;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.LinearLayout;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    RadioGroup radioGroup;
    RadioButton radioRed, radioGreen, radioBlue;
    LinearLayout rootLayout;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        radioGroup = findViewById(R.id.radioGroup);
        radioRed = findViewById(R.id.radioRed);
        radioGreen = findViewById(R.id.radioGreen);
        radioBlue = findViewById(R.id.radioBlue);
        rootLayout = findViewById(R.id.rootLayout);

        radioGroup.setOnCheckedChangeListener((group, checkedId) -> {
            switch (checkedId) {
```

```
case R.id.radioRed:
    rootLayout.setBackgroundColor(Color.RED);
    break;
case R.id.radioGreen:
    rootLayout.setBackgroundColor(Color.GREEN);
    break;
case R.id.radioBlue:
    rootLayout.setBackgroundColor(Color.BLUE);
    break;
    }
    });
}
```

Output:



