Q-2. Create an android application that will be able to suggest whether the user should take umbrella or not based on some conditions

Take umbrella if any of the following selected otherwise don’t take umbrella

* Already raining
* Air is cool and Summer and Sun is not visible
* Morning and winter and Air is cool

<https://github.com/18mca8021/>WeatherApp

Code:

Activity\_main.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout 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"  
 android:background="@drawable/ic\_launcher\_foreground"  
 tools:context=".MainActivity"**>  
  
 <**TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="36dp"  
 android:layout\_marginBottom="550dp"  
 android:text="UMBRELLA SUGGESTION"  
 android:textSize="30dp"** />  
  
 <**RadioGroup  
 android:id="@+id/radioGroup"  
 android:layout\_width="378dp"  
 android:layout\_height="134dp"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="14dp"  
 android:layout\_marginBottom="330dp"**>  
  
 <**RadioButton  
 android:id="@+id/radioButton1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="Already raining"** />  
  
 <**RadioButton  
 android:id="@+id/radioButton2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="Air is cool and Summer and Sun is not visible"** />  
  
 <**RadioButton  
 android:id="@+id/radioButton3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="Morning and winter and Air is cool"** />  
 </**RadioGroup**>  
  
 <**Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="156dp"  
 android:layout\_marginBottom="201dp"  
 android:text="Clear"** />  
  
</**RelativeLayout**>

MainActivity.java

**package** com.example.weatherapp;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.RadioButton;  
**import** android.widget.RadioGroup;  
**import** android.widget.Toast;  
  
**public class** MainActivity **extends** AppCompatActivity {  
 RadioGroup **rg**;  
 RadioButton **radioButton1**,**radioButton2**,**radioButton3**;  
 Button **button1**,**button2**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate( savedInstanceState );  
 setContentView( R.layout.***activity\_main*** );  
 **radioButton1** = findViewById( R.id.***radioButton1*** );  
 **radioButton2** = findViewById( R.id.***radioButton2*** );  
 **radioButton3** = findViewById( R.id.***radioButton3*** );  
 **button2** = findViewById( R.id.***button2*** );  
  
 **button2**.setOnClickListener( **new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 **radioButton1**.setChecked( **false** );  
 **radioButton2**.setChecked( **false** );  
 **radioButton3**.setChecked( **false** );  
 }  
 } );  
  
 }  
  
 **public void** onRadioButtonClicked(View view) {  
 **boolean** checked = ((RadioButton)view).isChecked();  
 **switch** (view.getId()){  
 **case** R.id.***radioButton1***:  
 **if** (checked){  
 Toast.*makeText*( getApplicationContext(),**"take umbrella"**,Toast.***LENGTH\_SHORT*** ).show();  
 }  
 **case** R.id.***radioButton2***:  
 **if** (checked){  
 Toast.*makeText*( getApplicationContext(),**"take umbrella"**,Toast.***LENGTH\_SHORT*** ).show();  
 }  
 **case** R.id.***radioButton3***:  
 **if** (checked){  
 Toast.*makeText*( getApplicationContext(),**"take umbrella"**,Toast.***LENGTH\_SHORT*** ).show();  
 }  
  
 }  
 }  
}

Output

 