Practical 12

Mobile Application Development

Question 1. Write a program to show following output. First two Radiobuttons are without using Radio Group and next two Radiobuttons are using Radio Group. Toast which radio button is selected.

MainActivity.java

```java
package com.example.practical12;
import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
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 {
    RadioButton r1,r2,r;
    RadioGroup rg;
    Button b;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        r1=findViewById(R.id.radioButton1);
        r2=findViewById(R.id.radioButton2);
        rg=findViewById(R.id.rgp);
        b=findViewById(R.id.button);
        View.OnClickListener cl=new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String msg="";
                if(r1.isChecked())
                    msg=msg+"Radio Button 1";
                if(r2.isChecked())
                    msg=msg+",Radio Button 2";
                if(!msg.equals(""))
                    Toast.makeText(MainActivity.this,"Selected radio button: "+msg,Toast.LENGTH_LONG).show();

                int rid=rg.getCheckedRadioButtonId();
                r=findViewById(rid);
                if(r!=null)
                    Toast.makeText(MainActivity.this,"Selected Gender:"+r.getText().toString(),Toast.LENGTH_LONG).show();
```

```
            }
        };
        b.setOnClickListener(cl);
    }
}


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">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">
        <TextView
            android:id="@+id/textView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="20dp"
            android:layout_gravity="center_horizontal"
            android:textSize="20dp"
            android:text="Single Radio Buttons" />
        <RadioButton
            android:id="@+id/radioButton1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="20dp"
            android:text="Radio Button 1" />
        <RadioButton
            android:id="@+id/radioButton2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="20dp"
            android:text="Radio Button 2" />
        <View
            android:id="@+id/divider"
            android:layout_width="match_parent"
            android:layout_height="2dp"
            android:background="?android:attr/listDivider"
```

```xml
        android:layout_marginTop="10dp"/>
    <RadioGroup
        android:id="@+id/rgp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" >
        <RadioButton
            android:id="@+id/rbmale"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="20dp"
            android:text="Male" />
        <RadioButton
            android:id="@+id/rbfemale"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="20dp"
            android:text="Female" />
    </RadioGroup>
    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:background="@color/black"
        android:backgroundTint="#7C7A7A"
        android:text="Show selected"
         />
    </LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

Output