Practical 12

Q1.
XML Code:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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="wrap_content"
    android:orientation="vertical"
    android:layout_gravity="center_horizontal"
    android:layout_marginTop="125sp"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/tv1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Single Radio Buttons"
        android:gravity="center"
        android:textSize="22sp"/>

    <RadioButton
        android:id="@+id/rb1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="RadioButton 1"/>

    <RadioButton
        android:id="@+id/rb2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="RadioButton 2"/>

    <TextView
        android:id="@+id/tv2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Radio button inside
RadioGroup"
        android:gravity="center"
        android:textSize="22sp"/>

    <RadioGroup
        android:id="@+id/rg1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content">

        <RadioButton
            android:id="@+id/rb3"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Male" />

        <RadioButton
            android:id="@+id/rb4"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Female" />
    </RadioGroup>
        <Button
            android:id="@+id/btn1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="SHOW SELECTED"
            android:layout_gravity="center"
            android:layout_marginTop="10dp"/>
</LinearLayout>
```

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JAVA Code:

```java
package com.example.radiobuttonradiogroup;

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 {

    Button b1;
    RadioButton r1,r2,r3;
    RadioGroup rg1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1=(Button)findViewById(R.id.btn1);
        r1=(RadioButton)findViewById(R.id.rb1);
        r2=(RadioButton)findViewById(R.id.rb2);
        rg1=(RadioGroup)findViewById(R.id.rg1);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int id=rg1.getCheckedRadioButtonId();
                r3=(RadioButton)findViewById(id);
                StringBuffer s=new StringBuffer();

                if (r1.isChecked()) {
                    s.append(r1.getText() + "\n");
                }
                if (r2.isChecked()) {
                    s.append(r2.getText() + "\n");
                }
                if (r3.isChecked()) {
                    s.append(r3.getText());
                }
                Toast.makeText(getApplicationContext(),s.toString(),Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

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Output: