Project

INTRODUCTION

The android application that is developed is useful in conducting tests. The quiz application helps the user to test their knowledge in available topics in the application. The application is simple and easy to use. It uses the concepts of Intents,Radio Groups,Activities,Buttons,Toast messages in android.

The app is structured as follows:

1) Firstly when the user opens the app the home screen asks the user to enter name and number.
2) It checks if the fields are empty and displays message to the user to enter details before clicking submit button
3) On submitting the details the next activity appears where the user can select one of the available topics in the screen.
4) It checks if the user has selected any of the available options and displays message to the user to select one option before clicking submit button
5) On selecting the topic the user will be directed to the corresponding screen.
6) Now the user can answer the questions(mcqs) present in that section.
7) On submitting the answers the user can view the score obtained.

WorkFlow

MainActivity.java

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Main2Activity.java

/ | \

Main3   Main4   Main5
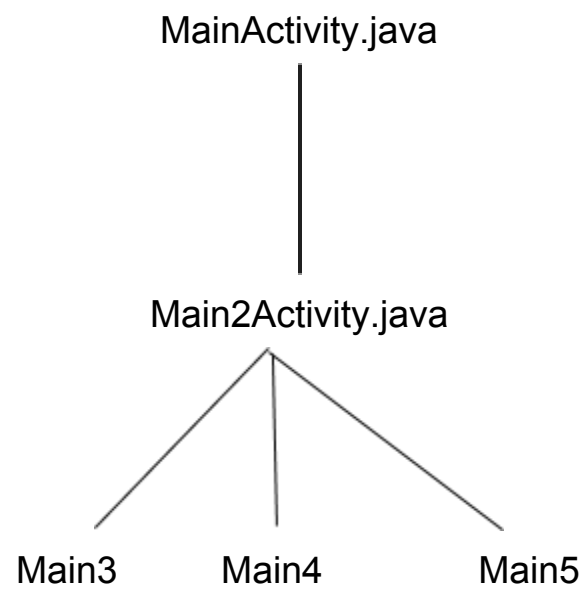
CODES

activity_main.xml :

```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">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="WELCOME"
        android:textSize="18sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.467"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.115" />

    <EditText
        android:id="@+id/name"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="194dp"
        android:ems="10"
        android:hint="NAME"
```

```xml
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/no"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Number"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/next"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="167dp"
        android:text="NEXT"
        android:textSize="18sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```java
package com.example.quiz;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    Button nxt;
    EditText name,num;
```

```java
Intent i;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    nxt=findViewById(R.id.next);
    name=findViewById(R.id.name);
    num=findViewById(R.id.no);
    nxt.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            String nam=name.getText().toString();
            String number=num.getText().toString();
            if(nam.isEmpty() || number.isEmpty())
                Toast.makeText(getApplicationContext(),"enter the
details",Toast.LENGTH_SHORT).show();
            else
            {
                i=new Intent(getApplicationContext(),Main2Activity.class);
                i.putExtra("name",nam);
                i.putExtra("number",number);
                startActivity(i);
            }
        }
    });
}
}
```

activity_main2.xml :

```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=".Main2Activity">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="64dp"
        android:layout_marginLeft="64dp"
        android:layout_marginTop="73dp"
        android:layout_marginEnd="64dp"
        android:layout_marginRight="64dp"
```

```xml
        android:text="Select one of the following topics"
        android:textSize="18sp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/submit"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="133dp"
        android:layout_marginLeft="133dp"
        android:layout_marginTop="107dp"
        android:text="SUBMIT"
        android:textSize="18sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/rg" />

    <RadioGroup
        android:id="@+id/rg"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="97dp"
        android:layout_marginLeft="97dp"
        android:layout_marginTop="178dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent">

        <RadioButton
            android:id="@+id/rb1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Country/Capital"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/rb2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="MATHS"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton3"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="General"
```

```xml
            android:textSize="18sp" />
    </RadioGroup>
</androidx.constraintlayout.widget.ConstraintLayout>
```

Main2Activity.java

```java
package com.example.quiz;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
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 Main2Activity extends AppCompatActivity {
    RadioGroup rg;
    Button submit;
    RadioButton rb;
    Intent i,i2;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        i=getIntent();
        final String name=i.getStringExtra("name");
        final String num=i.getStringExtra("number");
        rg=findViewById(R.id.rg);
        submit=findViewById(R.id.submit);
        rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb=group.findViewById(checkedId);
            }
        });
        submit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v)
            {
                int id = rg.getCheckedRadioButtonId();
                if(id!=-1)
                {
                    String option=rb.getText().toString();
                    if(option.equals("Country/Capital"))
```

```java
        {
            i2=new Intent(getApplicationContext(),Main3Activity.class);
            i2.putExtra("name",name);
            i2.putExtra("number",num);
            startActivity(i2);
        }
        else if(option.equals("MATHS"))
        {
            i2=new Intent(getApplicationContext(),Main4Activity.class);
            i2.putExtra("name",name);
            i2.putExtra("number",num);
            startActivity(i2);
        }
        else if(option.equals("General"))
        {
            i2=new Intent(getApplicationContext(),Main5Activity.class);
            i2.putExtra("name",name);
            i2.putExtra("number",num);
            startActivity(i2);
        }
    }
    else
    {
        Toast.makeText(getApplicationContext(),"select one of the
options",Toast.LENGTH_SHORT).show();
    }
  }
});
 }
}
```

activity_main3.xml :

```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=".Main3Activity">

  <TextView
    android:id="@+id/q3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="24dp"
    android:layout_marginLeft="24dp"
```

```xml
    android:text="3) Capital of Germany"
    android:textSize="18sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/rg2" />

<RadioGroup
    android:id="@+id/rg3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="26dp"
    android:layout_marginLeft="26dp"
    android:layout_marginTop="24dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/q3">

    <RadioButton
        android:id="@+id/radioButton12"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Hamburg"
        android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton9"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Essen"
        android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton13"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Berlin"
        android:textSize="18sp" />
</RadioGroup>

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="Country/Capital"
    android:textSize="18sp"
    android:textStyle="bold"
    app:layout_constraintStart_toEndOf="@+id/q1"
    app:layout_constraintTop_toTopOf="parent" />
```

```xml
<Button
    android:id="@+id/next"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="152dp"
    android:layout_marginLeft="152dp"
    android:text="NEXT"
    android:textSize="18sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.976" />

<TextView
    android:id="@+id/q2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginLeft="16dp"
    android:layout_marginTop="12dp"
    android:text="2)Capital of Srilanka"
    android:textSize="18sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/rg" />

<RadioGroup
    android:id="@+id/rg2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="26dp"
    android:layout_marginLeft="26dp"
    android:layout_marginTop="23dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/q2">

    <RadioButton
        android:id="@+id/radioButton6"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="harare"
        android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton8"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="gale"
        android:textSize="18sp" />
```

```xml
    <RadioButton
        android:id="@+id/op1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Colombo"
        android:textSize="18sp" />
</RadioGroup>

<TextView
    android:id="@+id/q1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginLeft="16dp"
    android:layout_marginTop="60dp"
    android:text="1) Capital of india"
    android:textSize="18sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<RadioGroup
    android:id="@+id/rg"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="24dp"
    android:layout_marginLeft="24dp"
    android:layout_marginTop="22dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/q1">

    <RadioButton
        android:id="@+id/radioButton15"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="delhi"
        android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton16"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="mumbai"
        android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton17"
        android:layout_width="match_parent"
```

```xml
            android:layout_height="wrap_content"
            android:text="kolkata"
            android:textSize="18sp" />
    </RadioGroup>

</androidx.constraintlayout.widget.ConstraintLayout>
```

Main3Activity.java

```java
package com.example.quiz;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
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 Main3Activity extends AppCompatActivity {
    RadioGroup rg,rg2,rg3;
    Button nxt;
    RadioButton rb1,rb2,rb3;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main3);
        rg=findViewById(R.id.rg);
        rg2=findViewById(R.id.rg2);
        rg3=findViewById(R.id.rg3);
        nxt=findViewById(R.id.next);
        rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb1=group.findViewById(checkedId);
            }
        });
        rg2.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb2=group.findViewById(checkedId);
            }
        });
        rg3.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb3=group.findViewById(checkedId);
```

```java
        }
    });
    nxt.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            int id = rg.getCheckedRadioButtonId();
            int score=0;
            if(id!=-1)
            {
                String option=rb1.getText().toString();
                if(option.equals("delhi"))
                {
                    score+=1;
                }
            }
            id=rg2.getCheckedRadioButtonId();
            if(id!=-1)
            {
                String option=rb2.getText().toString();
                if(option.equals("Colombo"))
                {
                    score+=1;
                }
            }
            id=rg3.getCheckedRadioButtonId();
            if(id!=-1)
            {
                String option=rb3.getText().toString();
                if(option.equals("Berlin"))
                {
                    score+=1;
                }
            }
            Intent i=i=getIntent();
            final String name=i.getStringExtra("name");
            final String num=i.getStringExtra("number");
            String msg="Name: "+name+" Number: "+num+" Score: "+score;
            System.out.println(msg);
            Toast.makeText(getApplicationContext(),msg,Toast.LENGTH_LONG).show();

        }
    });
  }
}
```

activity_main4.xml :

```xml
<?xml version="1.0" encoding="utf-8"?>
```

```xml
<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=".Main4Activity">

    <TextView
        android:id="@+id/q3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="24dp"
        android:layout_marginLeft="24dp"
        android:text="3) Profit="
        android:textSize="18sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/rg2" />

    <RadioGroup
        android:id="@+id/rg3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="26dp"
        android:layout_marginLeft="26dp"
        android:layout_marginTop="24dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/q3">

        <RadioButton
            android:id="@+id/radioButton12"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="SP+CP"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton9"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="CP-SP"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton13"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="SP-CP"
```

```xml
            android:textSize="18sp" />
    </RadioGroup>

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="48dp"
        android:layout_marginLeft="48dp"
        android:layout_marginTop="16dp"
        android:text="MATHS"
        android:textSize="18sp"
        android:textStyle="bold"
        app:layout_constraintStart_toEndOf="@+id/q1"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/next"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="152dp"
        android:layout_marginLeft="152dp"
        android:text="NEXT"
        android:textSize="18sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.976" />

    <TextView
        android:id="@+id/q2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginLeft="16dp"
        android:layout_marginTop="12dp"
        android:text="2)x+y=2 ,2x-y=5 then x="
        android:textSize="18sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/rg" />

    <RadioGroup
        android:id="@+id/rg2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="26dp"
        android:layout_marginLeft="26dp"
        android:layout_marginTop="23dp"
```

```xml
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/q2">

        <RadioButton
            android:id="@+id/radioButton6"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="1"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton8"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="2"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/op1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="3"
            android:textSize="18sp" />
    </RadioGroup>

    <TextView
        android:id="@+id/q1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginLeft="16dp"
        android:layout_marginTop="60dp"
        android:text="1) tan x="
        android:textSize="18sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <RadioGroup
        android:id="@+id/rg"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="24dp"
        android:layout_marginLeft="24dp"
        android:layout_marginTop="22dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/q1">

        <RadioButton
```

```xml
            android:id="@+id/radioButton15"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="sinx/cosx"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton16"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="cotx"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton17"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="cosecx*cosx"
            android:textSize="18sp" />
    </RadioGroup>

</androidx.constraintlayout.widget.ConstraintLayout>
```

Main4Activity.java

```java
package com.example.quiz;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
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 Main4Activity extends AppCompatActivity {
    RadioGroup rg,rg2,rg3;
    Button nxt;
    RadioButton rb1,rb2,rb3;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main4);
        rg=findViewById(R.id.rg);
        rg2=findViewById(R.id.rg2);
        rg3=findViewById(R.id.rg3);
        nxt=findViewById(R.id.next);
```

```java
rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
    @Override
    public void onCheckedChanged(RadioGroup group, int checkedId) {
        rb1=group.findViewById(checkedId);
    }
});
rg2.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
    @Override
    public void onCheckedChanged(RadioGroup group, int checkedId) {
        rb2=group.findViewById(checkedId);
    }
});
rg3.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
    @Override
    public void onCheckedChanged(RadioGroup group, int checkedId) {
        rb3=group.findViewById(checkedId);
    }
});
nxt.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        int id = rg.getCheckedRadioButtonId();
        int score=0;
        if(id!=-1)
        {
            String option=rb1.getText().toString();
            if(option.equals("sinx/cosx"))
            {
                score+=1;
            }
        }
        id=rg2.getCheckedRadioButtonId();
        if(id!=-1)
        {
            String option=rb2.getText().toString();
            if(option.equals("3"))
            {
                score+=1;
            }
        }
        id=rg3.getCheckedRadioButtonId();
        if(id!=-1)
        {
            String option=rb3.getText().toString();
            if(option.equals("SP-CP"))
            {
                score+=1;
            }
```

```
        }
        Intent i=i=getIntent();
        final String name=i.getStringExtra("name");
        final String num=i.getStringExtra("number");
        String msg="Name: "+name+" Number: "+num+" Score: "+score;
        Toast.makeText(getApplicationContext(),msg,Toast.LENGTH_LONG).show();


        }
    });
  }
}
```

activity_main5.xml

```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">

  <TextView
    android:id="@+id/q3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="24dp"
    android:layout_marginLeft="24dp"
    android:text="3) 2+2="
    android:textSize="18sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/rg2" />

  <RadioGroup
    android:id="@+id/rg3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="26dp"
    android:layout_marginLeft="26dp"
    android:layout_marginTop="24dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/q3">

    <RadioButton
      android:id="@+id/radioButton12"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:text="6"
```

```xml
            android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton9"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="8"
        android:textSize="18sp" />

    <RadioButton
        android:id="@+id/radioButton13"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="4"
        android:textSize="18sp" />
</RadioGroup>

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="48dp"
    android:layout_marginLeft="48dp"
    android:layout_marginTop="16dp"
    android:text="GENERAL"
    android:textSize="18sp"
    android:textStyle="bold"
    app:layout_constraintStart_toEndOf="@+id/q1"
    app:layout_constraintTop_toTopOf="parent" />

<Button
    android:id="@+id/next"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="152dp"
    android:layout_marginLeft="152dp"
    android:text="NEXT"
    android:textSize="18sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.976" />

<TextView
    android:id="@+id/q2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
```

```xml
        android:layout_marginLeft="16dp"
        android:layout_marginTop="12dp"
        android:text="2)Capital of Srilanka"
        android:textSize="18sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/rg" />

    <RadioGroup
        android:id="@+id/rg2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="26dp"
        android:layout_marginLeft="26dp"
        android:layout_marginTop="23dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/q2">

        <RadioButton
            android:id="@+id/radioButton6"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="harare"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton8"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="gale"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/op1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Colombo"
            android:textSize="18sp" />
    </RadioGroup>

    <TextView
        android:id="@+id/q1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginLeft="16dp"
        android:layout_marginTop="60dp"
        android:text="1) Capital of india"
        android:textSize="18sp"
```

```xml
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <RadioGroup
        android:id="@+id/rg"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="24dp"
        android:layout_marginLeft="24dp"
        android:layout_marginTop="22dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/q1">

        <RadioButton
            android:id="@+id/radioButton15"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="delhi"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton16"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="mumbai"
            android:textSize="18sp" />

        <RadioButton
            android:id="@+id/radioButton17"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="kolkata"
            android:textSize="18sp" />
    </RadioGroup>

</androidx.constraintlayout.widget.ConstraintLayout>
```

Main5Activity.java

```java
package com.example.quiz;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;
```

```java
public class Main5Activity extends AppCompatActivity {
    RadioGroup rg,rg2,rg3;
    Button nxt;
    RadioButton rb1,rb2,rb3;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main5);
        rg=findViewById(R.id.rg);
        rg2=findViewById(R.id.rg2);
        rg3=findViewById(R.id.rg3);
        nxt=findViewById(R.id.next);
        rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb1=group.findViewById(checkedId);
            }
        });
        rg2.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb2=group.findViewById(checkedId);
            }
        });
        rg3.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb3=group.findViewById(checkedId);
            }
        });
        nxt.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int id = rg.getCheckedRadioButtonId();
                int score=0;
                if(id!=-1)
                {
                    String option=rb1.getText().toString();
                    if(option.equals("delhi"))
                    {
                        score+=1;
                    }
                }
                id=rg2.getCheckedRadioButtonId();
                if(id!=-1)
                {
                    String option=rb2.getText().toString();
```

```java
        if(option.equals("Colombo"))
        {
            score+=1;
        }
    }
    id=rg3.getCheckedRadioButtonId();
    if(id!=-1)
    {
        String option=rb3.getText().toString();
        if(option.equals("4"))
        {
            score+=1;
        }
    }
    Intent i=i=getIntent();
    final String name=i.getStringExtra("name");
    final String num=i.getStringExtra("number");
    String msg="Name: "+name+" Number: "+num+" Score: "+score;
    Toast.makeText(getApplicationContext(),msg,Toast.LENGTH_LONG).show();
        }
    });
 }
}
```

HomeScreen
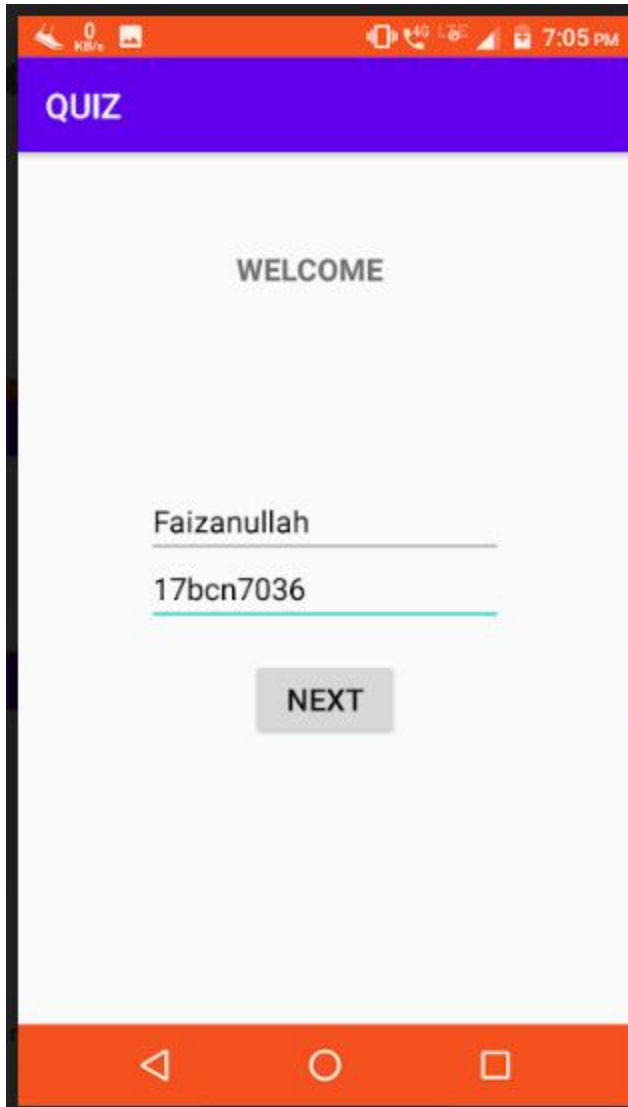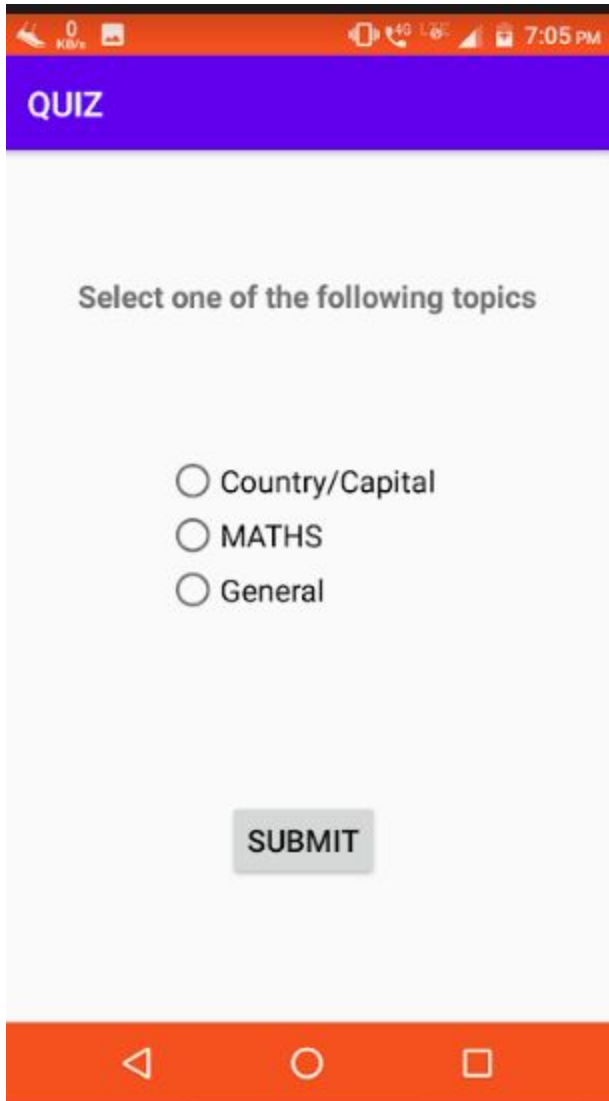
SecondScreen
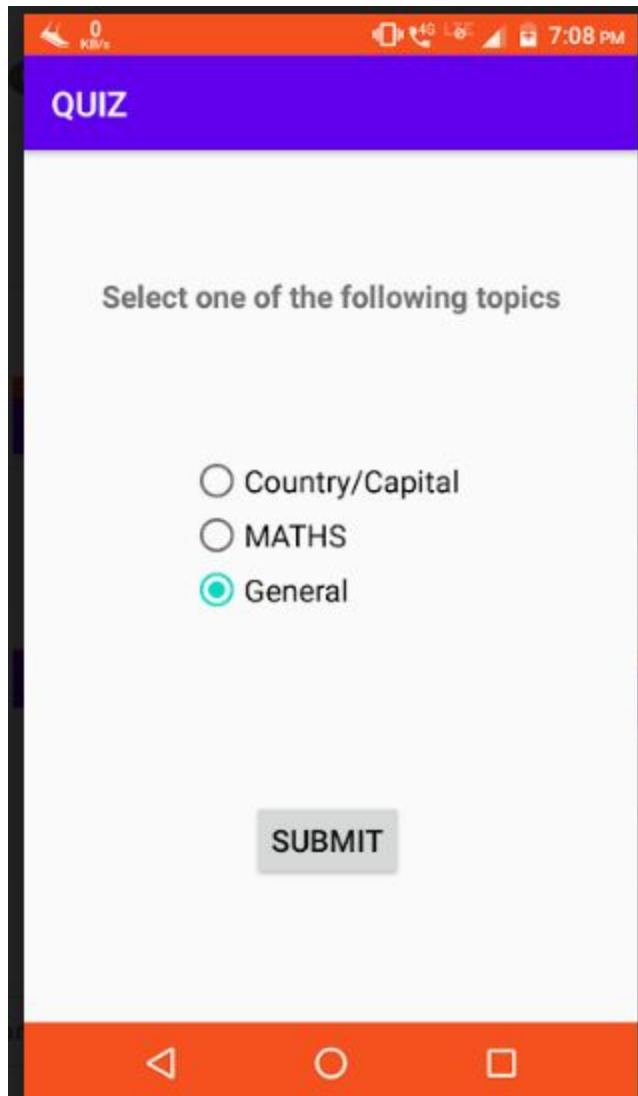
On clicking submit button user will be taken to corresponding activity.
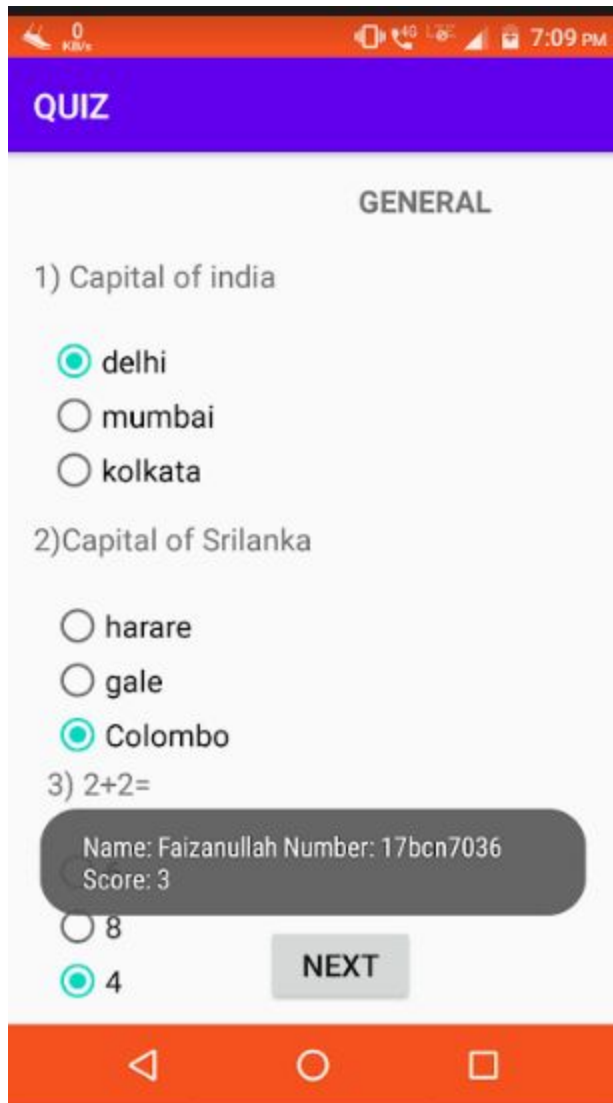
On submitting answers the user gets a score along with the name and number entered in the form of a toast message.