Q2] Create an Android application, with two activity first activity will have an EditText and a Button where the user can enter player name and after clicking on button the entered name will be display in another Activity. Second activity has the BACK button to transition to first activity (Using Intent).

Define the layout for the first activity (activity_main.xml):

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

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

    xmlns:tools="http://schemas.android.com/tools"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity">


    <EditText

        android:id="@+id/editTextName"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter player name"

        android:layout_margin="16dp"/>


    <Button

        android:id="@+id/buttonSubmit"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Submit"

        android:layout_below="@id/editTextName"

        android:layout_centerHorizontal="true"

        android:layout_marginTop="16dp"/>
```

</RelativeLayout>

Define the layout for the second activity (activity_display_name.xml):

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".DisplayNameActivity">

    <TextView
        android:id="@+id/textViewName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text=""
        android:textSize="24sp"
        android:layout_centerInParent="true"/>

    <Button
        android:id="@+id/buttonBack"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Back"
        android:layout_below="@id/textViewName"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="16dp"/>

</RelativeLayout>
```

Implement the logic in MainActivity.java and DisplayNameActivity.java:

```java
import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;


import androidx.appcompat.app.AppCompatActivity;


public class MainActivity extends AppCompatActivity {


    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);


        final EditText editTextName = findViewById(R.id.editTextName);

        Button buttonSubmit = findViewById(R.id.buttonSubmit);


        buttonSubmit.setOnClickListener(new View.OnClickListener() {

            @Override
            public void onClick(View v) {

                String playerName = editTextName.getText().toString();

                Intent intent = new Intent(MainActivity.this, DisplayNameActivity.class);

                intent.putExtra("PLAYER_NAME", playerName);

                startActivity(intent);

            }
```

```java
        });
    }
}




import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;



import androidx.appcompat.app.AppCompatActivity;



public class DisplayNameActivity extends AppCompatActivity {


    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_display_name);


        TextView textViewName = findViewById(R.id.textViewName);

        Button buttonBack = findViewById(R.id.buttonBack);


        Intent intent = getIntent();

        if (intent != null) {

            String playerName = intent.getStringExtra("PLAYER_NAME");
```

```java
            if (playerName != null && !playerName.isEmpty()) {

                textViewName.setText(playerName);

            }

        }


        buttonBack.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                finish();

            }

        });

    }

}
```

Declare the activities in the AndroidManifest.xml file:

```xml
<activity android:name=".MainActivity">

    <intent-filter>

        <action android:name="android.intent.action.MAIN" />


        <category android:name="android.intent.category.LAUNCHER" />

    </intent-filter>

</activity>

<activity android:name=".DisplayNameActivity" />
```