20) Write an Android application to accept two numbers from the user, and displays them, but reject input if both numbers are greater than 10 and asks for two new numbers.

Here's a simple Android application that accepts two numbers from the user, displays them, but rejects input if both numbers are greater than 10, asking for two new numbers:

1. \*\*Layout File (`activity\_main.xml`):\*\*

```xml

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

<LinearLayout 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"

android:orientation="vertical"

android:padding="16dp"

tools:context=".MainActivity">

<EditText

android:id="@+id/editTextNumber1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter number 1"

android:inputType="numberDecimal" />

<EditText

android:id="@+id/editTextNumber2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter number 2"

android:inputType="numberDecimal" />

<Button

android:id="@+id/btnSubmit"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Submit" />

<TextView

android:id="@+id/tvResult"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="16dp"

android:text=""

android:textSize="18sp" />

</LinearLayout>

```

2. \*\*Java Code (`MainActivity.java`):\*\*

```java

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

private EditText editTextNumber1;

private EditText editTextNumber2;

private Button btnSubmit;

private TextView tvResult;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

editTextNumber1 = findViewById(R.id.editTextNumber1);

editTextNumber2 = findViewById(R.id.editTextNumber2);

btnSubmit = findViewById(R.id.btnSubmit);

tvResult = findViewById(R.id.tvResult);

btnSubmit.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// Get input numbers

int num1 = Integer.parseInt(editTextNumber1.getText().toString());

int num2 = Integer.parseInt(editTextNumber2.getText().toString());

// Check if both numbers are greater than 10

if (num1 > 10 && num2 > 10) {

// Clear EditText fields

editTextNumber1.setText("");

editTextNumber2.setText("");

// Prompt user to enter new numbers

tvResult.setText("Both numbers should be less than or equal to 10. Please enter new numbers.");

} else {

// Display the input numbers

tvResult.setText("Number 1: " + num1 + ", Number 2: " + num2);

}

}

});

}

}

```

This code creates an Android app with two EditText fields for entering numbers and a button to submit the input. It also includes a TextView to display the result. If both numbers entered are greater than 10, it clears the EditText fields and prompts the user to enter new numbers. Otherwise, it displays the entered numbers.