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| **a. Create an Android app to show and implement table layout.** |

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| **b. Develop an Android Application that can calculate the sum of digits of a given number.** |  |

* **activity\_main.xml**

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:padding="16dp">

<TableLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content">

<TableRow>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Enter a number:"

android:padding="8dp" />

<EditText

android:id="@+id/numberInput"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:hint="Number"

android:inputType="number" />

</TableRow>

<TableRow>

<Button

android:id="@+id/calculateButton"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Calculate Sum" />

</TableRow>

<TableRow>

<TextView

android:id="@+id/resultText"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="16dp"

android:textSize="18sp" />

</TableRow>

</TableLayout>

</RelativeLayout>

* **MainActivity.java**

package com.example.sumofdigitstablelayout;

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 numberInput;

private Button calculateButton;

private TextView resultText;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

numberInput = findViewById(R.id.numberInput);

calculateButton = findViewById(R.id.calculateButton);

resultText = findViewById(R.id.resultText);

calculateButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String input = numberInput.getText().toString();

if (!input.isEmpty()) {

int sum = calculateSumOfDigits(input);

resultText.setText("Sum of digits: " + sum);

} else {

resultText.setText("Please enter a valid number.");

}

}

});

}

private int calculateSumOfDigits(String number) {

int sum = 0;

for (char digit : number.toCharArray()) {

sum += Character.getNumericValue(digit);

}

return sum;

}

}

* **Output: -**

