

- a. Create an Android app to show and implement table layout.
- 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"</pre>
  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>
```

```
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             <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() {
```

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@Override

public void onClick(View view) {

if (!input.isEmpty()) {

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

int sum = calculateSumOfDigits(input);

```
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```



```
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: -

Calculate Sum
Sum of digits: 10