DigitSum.txt

```
Project Name : Digit Of Sum```
  1. xml layouts:
  1.1. activity_main.xml:
  <?xml version="1.0" encoding="utf-8"?>
  candroidx.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"
                xmins:toois= nttp://scnemas.android.com/toois-
android:id=@+id/main'
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background=@fdrawable/background_picture'
tools:context=".MainActivity">
                  <TextView
                                 android:layout_marginTop="60dp"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
                                android:layout_height="wrap_content"
android:text="click fhis Intent and go to Sum activity"
android:textSize="34sp"
android:gravity="center"
android:fontfamily="sans-serif-smallcaps"
android:textStyle="bold"
app:layout_constraintBottom_toTopOf="@+id/textview"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHonizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.451" />
                  <TextView
                                  android:id="@+id/textview"
                                android:layout_width="185dp"
android:layout_width="185dp"
android:layout_height="67dp"
android:background="@drawable/textbutton"
android:onClick="Change_activity"
                                 android:padding="5dp"
android:text="Intent"
android:textColor="@color/black"
android:textSize="40sp"
                                 android:textSize="46sp"
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.499" />
div_contraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_ConstraintJayout_videof_
  </androidx.constraintlayout.widget.ConstraintLayout>
1.2. activity_digit_sum.xml:
    <?xml version="1.0" encoding="utf-0"?>
    candroidx.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:id="@+id/main"
android:layout_width="match_parent"
android:layout_height="match_parent"
                 android:background="@drawable/background_picture"
tools:context=".digitSumActivity">
                  <TextView
                                 android:id="@+id/textView"
                                android:1d="@+id/textView"
android:1ayout_width="264dp"
android:1ayout_meight="72dp"
android:1ayout_marginTop="124dp"
android:fontFamily="sans-serif-smallcaps"
android:gravity="center"
android:text="Sum of Digit"
android:text="sum of Digit"
android:text5ize="44sp"
                                 android:text5tyle="bold"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.423"
                                   app:layout constraintStart toStartOf="parent
                                   app:layout_constraintTop_toTopOf="parent" />
                  <EditText
                                ttlext
android:id="@+id/input"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="88dp"
android:ems="10"
                                 android:hint="Enter a digit"
android:inputType="text"
android:textColor="@color/black'
                                  android:textColorHint="@color/black"
android:textSize="25sp"
app:layout_constraintEnd_toEndOf="parent"
                                  app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView" />
                  <EditText
                                 android:id="@+id/output"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
                                 android:layout_marginTop="52dp"
android:ems="10"
android:inputType="text"
android:hint="Result"
                                 android:thit= Result
android:textColorHint="@color/black"
android:textSize="25sp"
app:layout_constraintEnd_toEndOf="@+id/input"
                                  app:layout_constraintHorizontal_bias="0.0"
app:layout constraintStart toStartOf="@+id/input"
                                  app:layout_constraintTop_toBottomOf="@+id/input" />
                  <Button
                                  android:id="@+id/button"
android:layout_width="139dp"
android:layout_height="60dp"
                                 android:layout_marginTop="48dp"
android:background="@drawable/textbutton"
android:text="Sum"
android:textSize="30sp"
 app:layout_constraintEnd_toEndOf="@+id/output"
app:layout_constraintStart_toStartOf="@+id/output"
app:layout_constraintTop_toBottomOf="@+id/output" />
</androidx.constraintlayout.widget.Constraintlayout>
```

```
2.1. MainActivity.java:
package com.example.digit_sum;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;
public class MainActivity extends AppCompatActivity {
      @Override
protected void onCreate(Bundle savedInstanceState) {
             super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
setContentView(R.layout.activity_main);
             SetContentview.inspud:.administrity_main);
ViewCompat.setOnApplyWindowInsetSitistener(findViewById(R.id.main), (v, insets) -> {
    Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
    v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
                    return insets;
             });
      public void change_activity(View view) {
    // Show a toast message before transitioning to the new activity.
    Toast.makeText(this, "WellCome into Digit Sum Activity", Toast.LENGTH_SHORT).show();
    Intent intent = new Intent(MainActivity.this, digitSumActivity.class);
    startActivity(intent);
2.2. digitSumActivity.java:
package com.example.digit_sum;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast:
import androidx.appcompat.app.AppCompatActivity;
public class digitSumActivity extends AppCompatActivity {
       private EditText input;
private EditText output;
private Button button;
       @Override
      protected void onCreate(Bundle savedInstanceState) {
   super.onCreate(savedInstanceState);
   setContentView(R.layout.activity_digit_sum);
}
             @Override
                    public void onClick(View v) {
    calculateDigitSum();
}
             });
       ,
private void calculateDigitSum() {
             try { $\ //\ $\rm Get \ the \ input \ number \ as \ a \ string}
                    // det the input number as a string
String inputText = input.getText().toString().trim();
// Check if the input is empty
if (inputText.isEmpty()) {
                           Toast.makeText(this, "Please enter a number", Toast.LENGTH_SHORT).show();
                    // Parse the input as an integer
int number = Integer.parseInt(inputText);
                    // Calculate the sum of digits
                    int sum = 0;
while (number != 0) {
    sum += number % 10;
    number /= 10;
                    // Display the result
output.setText(String.valueOf(sum));
                    output.setVisibility(View.VISIBLE);
             } catch (NumberFormatException e) {
   Toast.makeText(this, "Invalid input. Please enter a valid number.", Toast.LENGTH_SHORT).show();
     }
```