1) Display a message in the toast from a text box

**xml**

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

<androidx.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"

tools:context=".MainActivity">

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="32dp"

android:layout\_marginTop="40dp"

android:layout\_marginEnd="32dp"

android:onClick="handleClick"

android:text="Button"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/in" />

<EditText

android:id="@+id/in"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="24dp"

android:layout\_marginTop="243dp"

android:layout\_marginEnd="24dp"

android:ems="10"

android:hint="name"

android:inputType="text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**java**

package com.example.sreyas;

import android.os.Bundle;

import android.view.View;

import android.widget.EditText;

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 {

EditText Ed;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(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;

});

// User defined functionalities.

Ed = (EditText)findViewById(R.id.in);

}

public void clicked(View view) {

Toast.makeText(this, "hello world", Toast.LENGTH\_LONG).show();

}

public void handleClick(View view) {

Toast.makeText(this, Ed.getText(), Toast.LENGTH\_SHORT).show();

}

}

2) Display text from input box in text view.

**xml**

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

<androidx.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"

tools:context=".MainActivity">

<TextView

android:id="@+id/l1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<EditText

android:id="@+id/et1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="101dp"

android:layout\_marginEnd="101dp"

android:layout\_marginBottom="160dp"

android:ems="10"

android:hint="Enter some text"

android:inputType="text"

app:layout\_constraintBottom\_toTopOf="@+id/b1"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintStart\_toStartOf="parent" />

<Button

android:id="@+id/b1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="158dp"

android:layout\_marginTop="60dp"

android:layout\_marginEnd="162dp"

android:text="Button"

android:onClick="handleClick"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/l1" />

</androidx.constraintlayout.widget.ConstraintLayout>

**java**

package com.example.displaymessage;

import android.os.Bundle;

import android.view.View;

import android.widget.EditText;

import android.widget.TextView;

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 {

EditText ed;

TextView l;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(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;

});

ed = (EditText)findViewById(R.id.et1);

l = (TextView) findViewById(R.id.l1);

}

public void handleClick(View view) {

l.setText(ed.getText());

}

}

3) Simple calculator

**xml**

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

<androidx.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"

tools:context=".MainActivity">

<EditText

android:id="@+id/et1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="100dp"

android:layout\_marginTop="100dp"

android:layout\_marginEnd="100dp"

android:ems="10"

android:hint="Enter first number"

android:inputType="text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<EditText

android:id="@+id/et2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="100dp"

android:layout\_marginTop="44dp"

android:layout\_marginEnd="100dp"

android:ems="10"

android:hint="Enter second number"

android:inputType="text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/et1" />

<Button

android:id="@+id/plus"

android:layout\_width="60dp"

android:layout\_height="50dp"

android:layout\_marginStart="30dp"

android:layout\_marginTop="50dp"

android:onClick="findSum"

android:text="+"

app:layout\_constraintEnd\_toStartOf="@+id/minus"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/et2" />

<Button

android:id="@+id/minus"

android:layout\_width="60dp"

android:layout\_height="50dp"

android:layout\_marginStart="10dp"

android:layout\_marginTop="50dp"

android:layout\_marginEnd="10dp"

android:onClick="findDiff"

android:text="-"

app:layout\_constraintEnd\_toStartOf="@+id/star"

app:layout\_constraintStart\_toEndOf="@+id/plus"

app:layout\_constraintTop\_toBottomOf="@+id/et2" />

<Button

android:id="@+id/star"

android:layout\_width="60dp"

android:layout\_height="50dp"

android:layout\_marginStart="10dp"

android:layout\_marginTop="50dp"

android:layout\_marginEnd="10dp"

android:onClick="findProduct"

android:text="x"

app:layout\_constraintEnd\_toStartOf="@+id/div"

app:layout\_constraintStart\_toEndOf="@+id/minus"

app:layout\_constraintTop\_toBottomOf="@+id/et2" />

<Button

android:id="@+id/div"

android:layout\_width="60dp"

android:layout\_height="50dp"

android:layout\_marginStart="10dp"

android:layout\_marginTop="50dp"

android:layout\_marginEnd="30dp"

android:onClick="findDiv"

android:text="/"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/star"

app:layout\_constraintTop\_toBottomOf="@+id/et2" />

<TextView

android:id="@+id/result"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="179dp"

android:layout\_marginTop="145dp"

android:layout\_marginEnd="175dp"

android:textSize="50dp"

android:textFontWeight="900"

android:text="\?"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/et2" />

</androidx.constraintlayout.widget.ConstraintLayout>

**java**

package com.example.simplecalculator;

import android.os.Bundle;

import android.view.View;

import android.widget.EditText;

import android.widget.TextView;

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 {

EditText a;

EditText b;

TextView result;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(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;

});

a = (EditText) findViewById(R.id.et1);

b = (EditText) findViewById(R.id.et2);

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

}

public void findSum(View view) {

int first = Integer.parseInt(String.valueOf(a.getText()));

int second = Integer.parseInt(String.valueOf(b.getText()));

int sum = first + second;

result.setText(String.valueOf(sum));

}

public void findDiff(View view) {

int first = Integer.parseInt(String.valueOf(a.getText()));

int second = Integer.parseInt(String.valueOf(b.getText()));

int diff = first - second;

result.setText(String.valueOf(diff));

}

public void findProduct(View view) {

int first = Integer.parseInt(String.valueOf(a.getText()));

int second = Integer.parseInt(String.valueOf(b.getText()));

int pro = first \* second;

result.setText(String.valueOf(pro));

}

public void findDiv(View view) {

float first = Float.parseFloat(String.valueOf(a.getText()));

float second = Float.parseFloat(String.valueOf(b.getText()));

float div = (float)first / second;

result.setText(String.valueOf(div));

}

}