**ANDROID LAB 2**

**1. Addition of 2 number**

**CODE**

**Main Activity.java**

package com.example.add\_app;

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 {

Button b;

TextView tv,tv1;

EditText et,et1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b=findViewById(R.id.btn);

tv=findViewById(R.id.text2);

tv1=findViewById(R.id.text3);

et=findViewById(R.id.edit);

et1=findViewById(R.id.edit1);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

//String val=et.getText().toString();

Integer val1=Integer.parseInt(et.getText().toString());

//tv.setText("the answer is"+val);

// Integer val1=Integer.parseInt(et.getText().toString());

Integer val2=Integer.parseInt(et1.getText().toString());

tv.setText("the value is"+val1+"the value is"+val2);

Integer val3=val1 + val2;

if(et.length() > 5){

et.setError("to long");

}

else

{

tv.setText("the value is"+val3);

}

}

});

}

}

**Activitymain.xml**

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

<LinearLayout 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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal" >

<TextView

android:id="@+id/text1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="number" />

<EditText

android:id="@+id/edit"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="number" />

</LinearLayout>

<TextView

android:id="@+id/text3"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Enter the second number" />

<EditText

android:id="@+id/edit1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="number" />

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:text="Add Button" />

<TextView

android:id="@+id/text2"

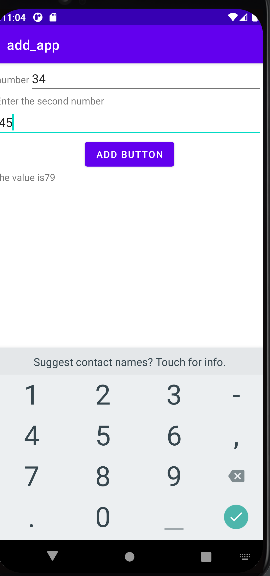
android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="number is" />

</LinearLayout>

**Output**



**2. Finding odd or even**

**CODE**

**MainActivity.java**

package com.example.add\_app;

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 MainActivity2 extends AppCompatActivity {

Button b;

EditText et;

TextView tv;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

b=findViewById(R.id.btn);

tv=findViewById(R.id.text1);

et=findViewById(R.id.edit);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Integer val=Integer.parseInt(et.getText().toString());

if(val%2==0){

tv.setText(val+"is even");

}

else

{

tv.setText(val+"is odd");

}

}

});

}

}

**ActivityMain.xml**

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

<LinearLayout 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:layout\_width="match\_parent"

android:orientation="vertical"

android:layout\_height="match\_parent"

tools:context=".MainActivity2">

<TextView

android:id="@+id/text"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Enter the number"/>

<EditText

android:id="@+id/edit"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:inputType="number" />

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:text="check" />

<TextView

android:id="@+id/text1"

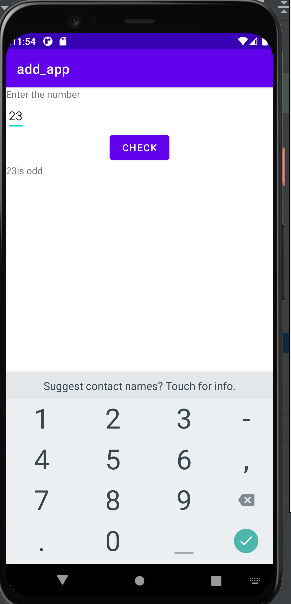
android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="the number"/>

</LinearLayout>

**Output**



**3. Create app for calculator**

**CODE**

**MainActivity.java**

package com.example.add\_app;

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 MainActivity3 extends AppCompatActivity {

Button bt1,bt2,bt3,bt4;

EditText et1,et2;

TextView tv1,tv2,tv5;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main3);

bt1=findViewById(R.id.button);

bt2=findViewById(R.id.button2);

bt3=findViewById(R.id.button3);

bt4=findViewById(R.id.button4);

tv1=findViewById(R.id.textView);

tv2=findViewById(R.id.textView2);

tv5=findViewById(R.id.textView5);

et1=findViewById(R.id.edit1);

et2=findViewById(R.id.edit2);

bt1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Integer val1=Integer.parseInt(et1.getText().toString());

Integer val2=Integer.parseInt(et2.getText().toString());

Integer val3=val1 + val2;

tv5.setText("the value is"+val3);

}

});

bt2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Integer val1=Integer.parseInt(et1.getText().toString());

Integer val2=Integer.parseInt(et2.getText().toString());

Integer val3=val1 - val2;

tv5.setText("the value is"+val3);

}

});

bt3.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Integer val1=Integer.parseInt(et1.getText().toString());

Integer val2=Integer.parseInt(et2.getText().toString());

Integer val3=val1 \* val2;

tv5.setText("the value is"+val3);

}

});

bt4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Integer val1=Integer.parseInt(et1.getText().toString());

Integer val2=Integer.parseInt(et2.getText().toString());

Integer val3=val1 / val2;

tv5.setText("the value is"+val3);

}

});

}

}

**ActivityMain.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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity3">

<TextView

android:id="@+id/textView"

android:layout\_width="85dp"

android:layout\_height="35dp"

android:text="First number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.426"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.064" />

<EditText

android:id="@+id/edit1"

android:layout\_width="120dp"

android:layout\_height="42dp"

android:ems="10"

android:inputType="number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.024"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.056" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Add"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.842"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.055" />

<Button

android:id="@+id/button2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Sub"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.842"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.175" />

<Button

android:id="@+id/button3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Mul"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.369"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.288" />

<Button

android:id="@+id/button4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Div"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.82"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.288" />

<TextView

android:id="@+id/textView2"

android:layout\_width="79dp"

android:layout\_height="43dp"

android:text="Second number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.436"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.181" />

<EditText

android:id="@+id/edit2"

android:layout\_width="118dp"

android:layout\_height="42dp"

android:ems="10"

android:inputType="number"

android:text=""

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.022"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.179" />

<TextView

android:id="@+id/textView5"

android:layout\_width="164dp"

android:layout\_height="37dp"

android:text="value is "

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.443"

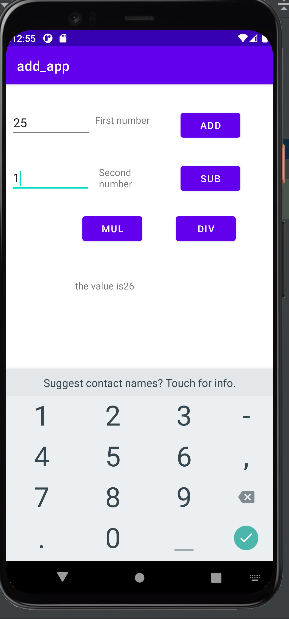
app:layout\_constraintStart\_toStartOf="parent"

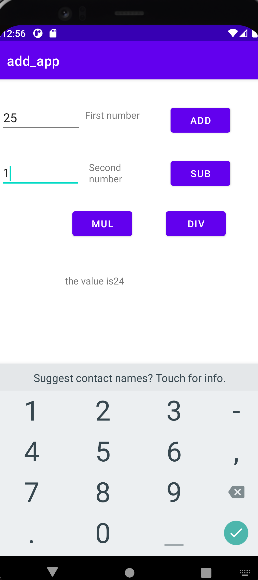
app:layout\_constraintTop\_toTopOf="parent"

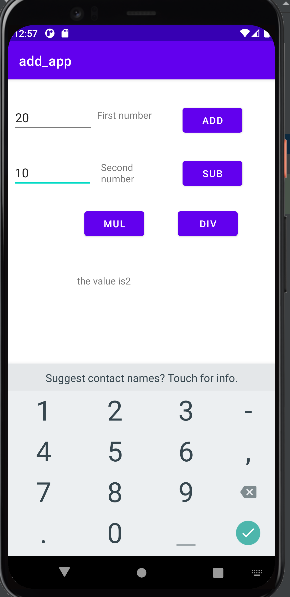
app:layout\_constraintVertical\_bias="0.431" />

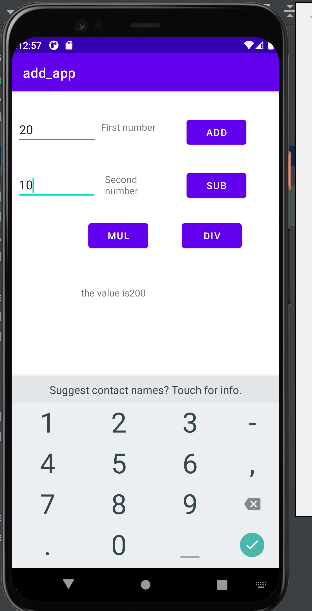
</androidx.constraintlayout.widget.ConstraintLayout>

**Output**

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