

Calculator

1. MainActivity.java

```
package com.example.calculator;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.KeyEvent;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        final EditText myEditText1 =
            (EditText)findViewById(R.id.editTextTextPersonName);
        final EditText myEditText2 =
            (EditText)findViewById(R.id.editTextTextPersonName2);
        final EditText myEditText3 =
            (EditText)findViewById(R.id.editTextTextPersonName3);
        Button myButton = (Button)findViewById(R.id.button);

        myEditText3.setOnKeyListener(new
            View.OnKeyListener() {
                public boolean onKey(View v, int keyCode,
                    KeyEvent event) {
                    if (keyCode == KeyEvent.KEYCODE_DPAD_UP)
                    {
                        String s1 =
myEditText1.getText().toString();
                        String s2 =
```

```

myEditText2.getText().toString();
        int s3 = Integer.parseInt(s1) +
Integer.parseInt(s2);

myEditText3.setText(String.valueOf(s3));
    }
    else if (keyCode ==
KeyEvent.KEYCODE_DPAD_DOWN){
        String s1 =
myEditText1.getText().toString();
        String s2 =
myEditText2.getText().toString();
        int s3 = Integer.parseInt(s1) -
Integer.parseInt(s2);

myEditText3.setText(String.valueOf(s3));
    }
    return false;
}
});

myButton.setOnClickListener(new
View.OnClickListener() {
    @Override
    public void onClick(View v) {
        myEditText1.setText("");
        myEditText2.setText("");
        myEditText3.setText("");
    }
});
}
}

```

2. activity_main.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=".MainActivity">
```

```
<TextView
```

```
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="188dp"
    android:layout_marginEnd="2dp"
    android:text="N2"
```

```
app:layout_constraintEnd_toStartOf="@+id/editTextTextPersonName2"
```

```
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<TextView
```

```
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="5dp"
    android:layout_marginBottom="80dp"
    android:text="N1"
    app:layout_constraintBottom_toTopOf="@+id/textView2"
```

```
app:layout_constraintEnd_toStartOf="@+id/editTextTextPersonName"
```

```
    app:layout_constraintStart_toStartOf="parent" />
```

```
<TextView
```

```
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```
    android:layout_marginStart="5dp"
    android:layout_marginTop="60dp"
    android:text="Result"
```

```
app:layout_constraintEnd_toStartOf="@+id/editTextTextPersonName3"
```

```
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView2"
```

```
/>
```

```
<Button
```

```
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="76dp"
    android:layout_marginTop="132dp"
    android:text="Clear"
    app:layout_constraintStart_toEndOf="@+id/textView3"
    app:layout_constraintTop_toBottomOf="@+id/textView3"
```

```
/>
```

```
<EditText
```

```
    android:id="@+id/editTextTextPersonName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="72dp"
    android:layout_marginEnd="25dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<EditText
```

```
    android:id="@+id/editTextTextPersonName2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```

        android:layout_marginTop="52dp"
        android:layout_marginEnd="13dp"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toEndOf="@+id/textView2"

app:layout_constraintTop_toBottomOf="@+id/editTextTextPerson
Name" />

```

```

<EditText
    android:id="@+id/editTextTextPersonName3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:layout_marginEnd="25dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView3"

app:layout_constraintTop_toBottomOf="@+id/editTextTextPerson
Name2" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

3.Strings.xml

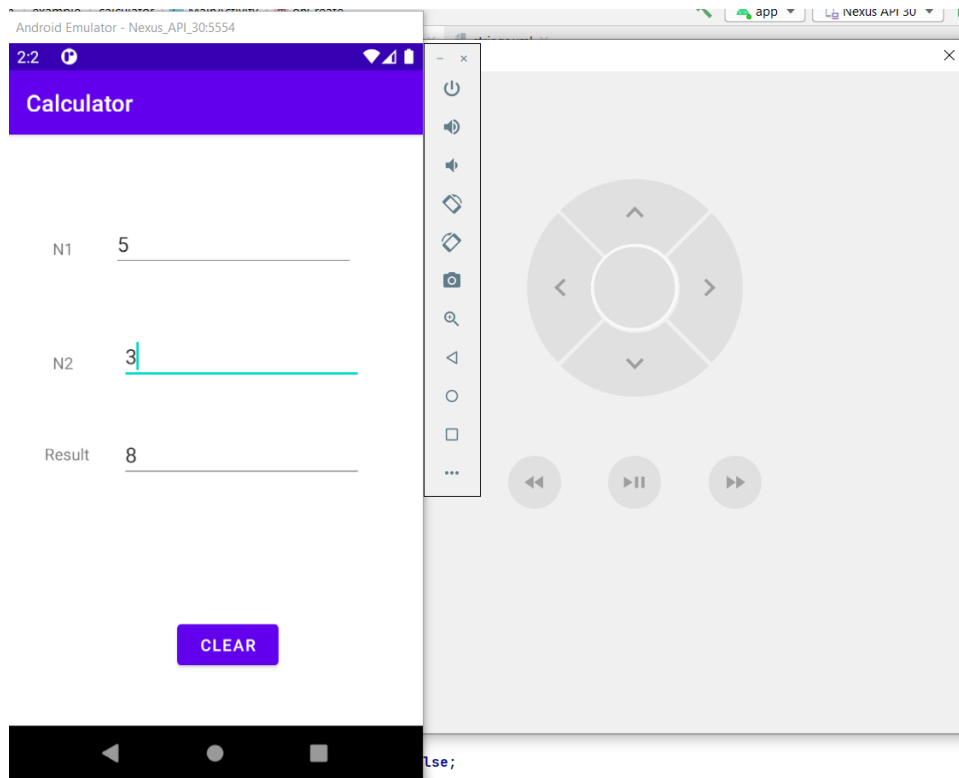
```

<resources>
    <string name="app_name">Calculator</string>
</resources>

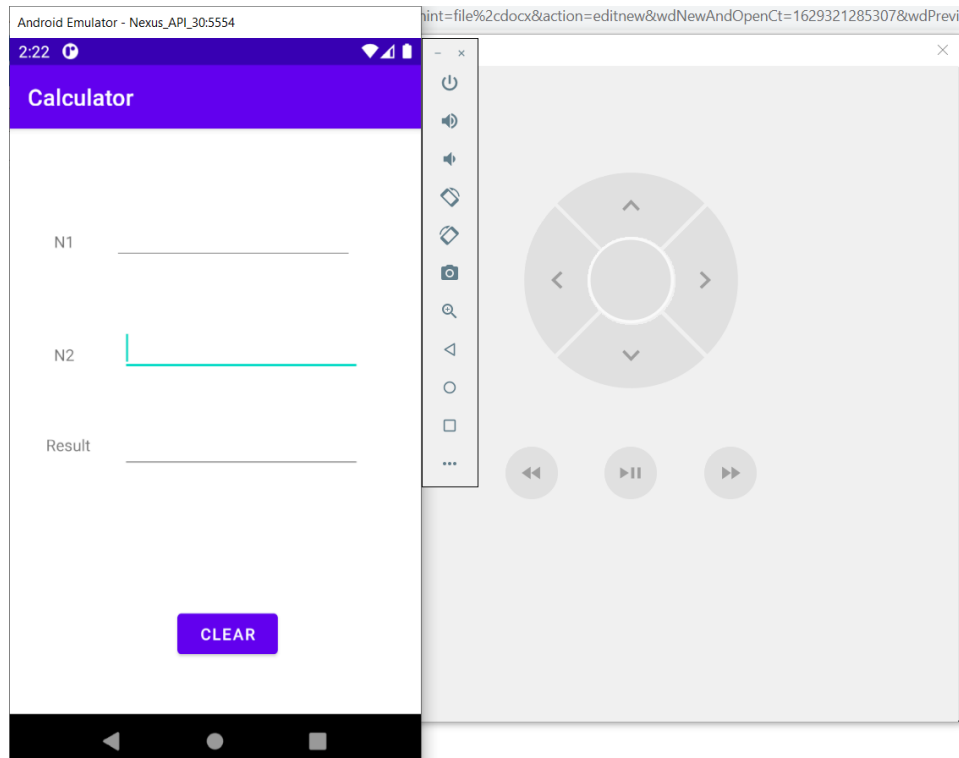
```

Output -

1. Addition - Pressing DPad UP Text field Result displays 8.



2. Pressing button "Clear" will erase the text in text field N1, N2 and Result.



3. Subtraction - Pressing DPad Down Text field Result displays -2.

2:24

Calculator

N1

3

N2

5

Result

-2

CLEAR

