

## Application 2

### Xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:weightSum="1">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/linearLayout1"
        android:layout_marginLeft="10pt"
        android:layout_marginRight="10pt"
        android:layout_marginTop="3pt">
        <EditText
            android:layout_weight="1"
            android:layout_height="wrap_content"
            android:layout_marginRight="5pt"
            android:id="@+id/etNum1"
            android:layout_width="match_parent"
            android:inputType="text">
        </EditText>
        <EditText
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:layout_marginLeft="5pt"
            android:id="@+id/etNum2"
            android:layout_width="match_parent"
            android:inputType="text">
        </EditText>
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/linearLayout2"
        android:layout_marginTop="3pt"
        android:layout_marginLeft="5pt"
        android:layout_marginRight="5pt">
        <Button
            android:layout_height="wrap_content"
            android:layout_width="match_parent"
            android:layout_weight="1"
            android:text="concatenation"
            android:textSize="8pt"
            android:id="@+id/btnAdd">
        </Button>
    </LinearLayout>
    <TextView
        android:layout_height="wrap_content"
        android:layout_width="match_parent"
        android:layout_marginLeft="5pt"
        android:layout_marginRight="5pt"
        android:textSize="12pt"
        android:layout_marginTop="3pt"
        android:id="@+id/tvResult"
```

```

        android:gravity="center_horizontal"
        android:layout_weight="0.07"
        android:textColor="#0000FF">
    </TextView>
</LinearLayout>

```

## Java

```

package com.example.calculator;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener{

    EditText etNum1;
    EditText etNum2;

    Button btnAdd;

    TextView tvResult;

    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // find the elements
        etNum1 = (EditText) findViewById(R.id.etNum1);
        etNum2 = (EditText) findViewById(R.id.etNum2);

        btnAdd = (Button) findViewById(R.id.btnAdd);

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

        // set a listener
        btnAdd.setOnClickListener(this);

    }

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
    }
}

```

```

String num1;
String num2;

// check if the fields are empty
if (TextUtils.isEmpty(etNum1.getText().toString())
    || TextUtils.isEmpty(etNum2.getText().toString())) {
    return;
}

// read EditText and fill variables with numbers
num1 = etNum1.getText().toString();
num2 = etNum2.getText().toString();

// defines the button that has been clicked and performs the
corresponding operation
// write operation into oper, we will use it later for output
switch (v.getId()) {
    case R.id.btnAdd:
        tvResult.setText(num1 + num2 );
        break;

    default:
        break;
}

// form the output line
}
}

```

screenshot

