

## PROGRAM

### //Activity\_main.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">

    <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="numberDecimal">

        </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="numberDecimal">
    </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="+"
        android:textSize="8pt"
        android:id="@+id/btnAdd">
    </Button>
    <Button
        android:layout_height="wrap_content"
        android:layout_width="match_parent"
        android:layout_weight="1"
        android:text="-"
        android:textSize="8pt"
        android:id="@+id/btnSub">
    </Button>
    <Button
        android:layout_height="wrap_content"
        android:layout_width="match_parent"

```

```

        android:layout_weight="1"

        android:text="*"

        android:textSize="8pt"

        android:id="@+id/btnMult">
</Button>

<Button

        android:layout_height="wrap_content"

        android:layout_width="match_parent"

        android:layout_weight="1"

        android:text="/"

        android:textSize="8pt"

        android:id="@+id/btnDiv">

</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">

</TextView>

</LinearLayout>

//Main_activity.java

package csllab.com.touchcalculator;

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;

public class MainActivity extends AppCompatActivity implements View.OnClickListener{

    EditText etNum1;

    EditText etNum2;

    Button btnAdd;

    Button btnSub;

    Button btnMult;

    Button btnDiv;

    TextView tvResult;

    String oper = "";

    /** 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);

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

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

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

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

        // set a listener

        btnAdd.setOnClickListener((View.OnClickListener) this);

```

```

        btnSub.setOnClickListener(this);

        btnMult.setOnClickListener(this);

        btnDiv.setOnClickListener(this);

    }

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

        float num1 = 0;

        float num2 = 0;

        float result = 0;

        // 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 = Float.parseFloat(etNum1.getText().toString());
        num2 = Float.parseFloat(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:
                oper = "+";

                result = num1 + num2;

```

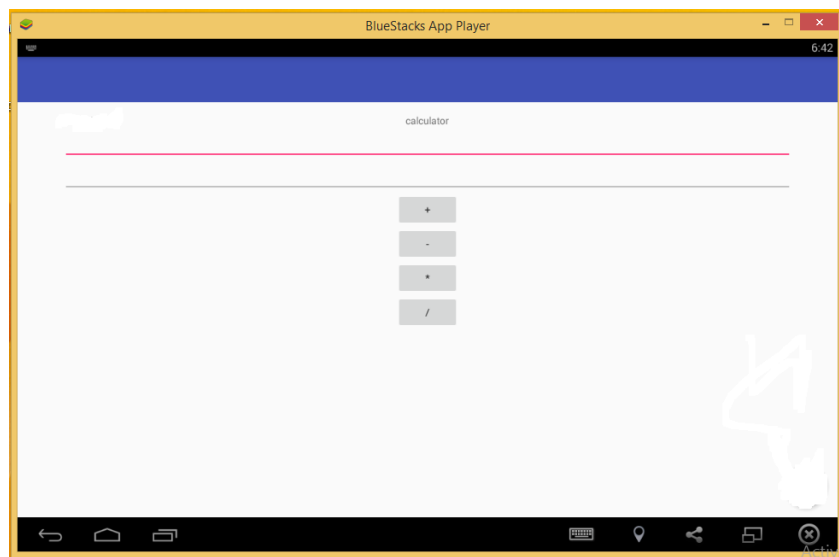
```

        break;
    case R.id.btnSub:
        oper = "-";
        result = num1 - num2;
        break;
    case R.id.btnMult:
        oper = "*";
        result = num1 * num2;
        break;
    case R.id.btnDiv:
        oper = "/";
        result = num1 / num2;
        break;
    default:
        break;
}

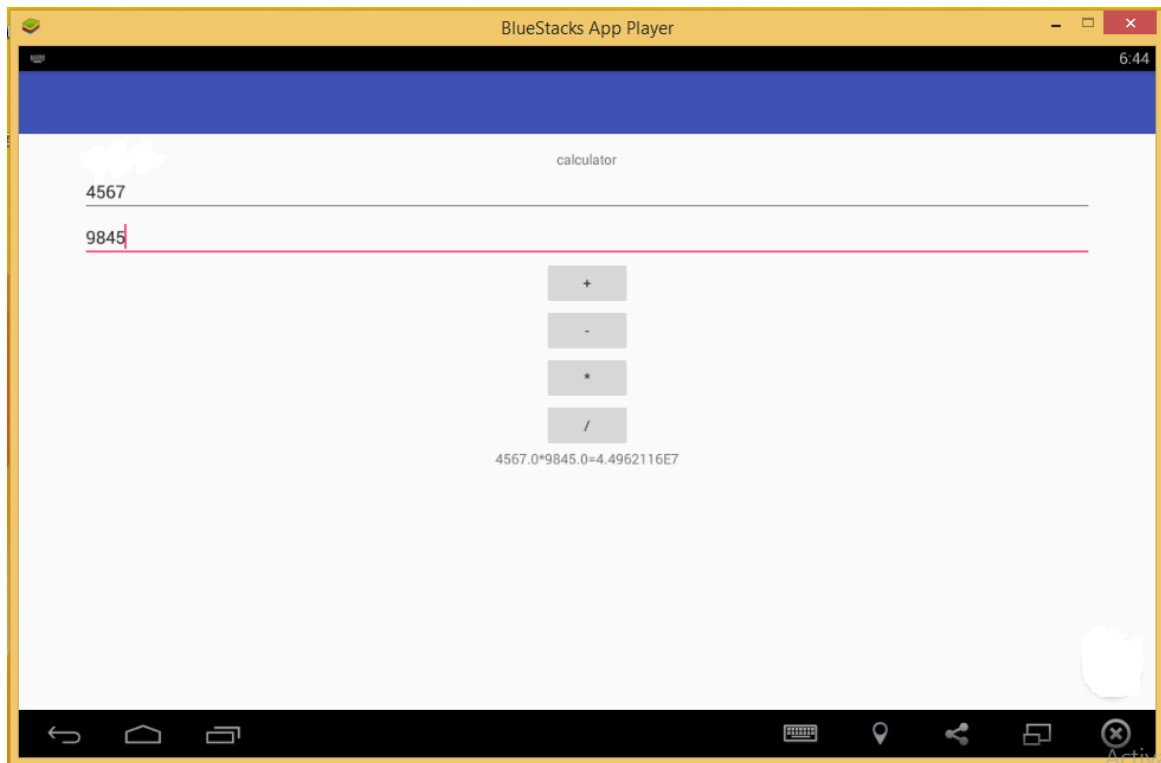
// form the output line
tvResult.setText(num1 + " " + oper + " " + num2 + " = " + result);
}
}

```

## OUTPUT



## 2.Touch Calculator



## 2.Touch Calculator