**Java file:**

import android.os.Bundle;

import android.app.Activity;

import android.text.TextUtils;

import android.view.View;

import android.view.View.OnClickListener;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends Activity implements OnClickListener {

EditText etNum1;

Button btnmm;

Button btncm;

Button btninc;

Button btninm;

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)

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

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

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

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

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

// set a listener

btnmm.setOnClickListener( this);

btncm.setOnClickListener(this)

btninc.setOnClickListener(this);

btninm.setOnClickListener(this);

}

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

float num1 = 0;

float result = 0;

// check if the fields are empty

if (TextUtils.isEmpty(etNum1.getText().toString()))

{

return;

}

// read EditText and fill variables with numbers

num1 = Float.parseFloat(etNum1.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.btnmm:

oper = "mm to cm";

result = (float) (num1 \* 0.1);

break;

case R.id.btncm:

oper = "cm to mm";

result = num1 \* 10;

break;

case R.id.btninc

oper = "in to cm"

result = (float) (num1 \* 2.54)

break;

case R.id.btninm:

oper = "in to mm"

result = (float) (num1 \* 25.4);

break;

default:

break;

}

// form the output line

tvResult.setText( "you have choosen " + oper +num1 + " " + " after converting" + result);

}

}