CALCULATOR

**package** com.example.calculator;

**import** android.support.v7.app.ActionBarActivity;

**import** android.os.Bundle;

**import** android.view.Menu;

**import** android.view.MenuItem;

**import** android.view.View;

**import** android.view.View.OnClickListener;

**import** android.widget.Button;

**import** android.widget.TextView;

**public** **class** MainActivity **extends** ActionBarActivity

{

Button one, two, three, four, five, six, seven, eight, nine, zero, add,

subtract, multiply, divide, clear, equal, decimal, posNeg;

//declaring variables

TextView disp;// display screen

String input1 = "";// input 1, = takes away the null

String input2 = "";// input 2, = takes away the null

String operation = "";// declaring an operation string, = takes away the

// null

Math math = **new** Math();// Aggregating the MATH class to GUI class

// Equation: input1 operation input2 || These will contain: i.e......2 \* 5

@Override

**protected** **void** onCreate(Bundle savedInstanceState)

{

**super**.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

disp = (TextView) findViewById(R.id.*screen*);

one = (Button) findViewById(R.id.*one*);

one.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 1;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 1;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

two = (Button) findViewById(R.id.*two*);

two.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 2;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 2;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

three = (Button) findViewById(R.id.*three*);

three.setOnClickListener(**new** OnClickListener() {

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 3;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 3;

}//end public void

setText();// this is displaying the if statement

}

});// ending onClickListener for one button

four = (Button) findViewById(R.id.*four*);

four.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 4;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 4;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

five = (Button) findViewById(R.id.*five*);

five.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 5;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 5;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

six = (Button) findViewById(R.id.*six*);

six.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 6;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 6;

}//end public void

setText();// this is displaying the if statement

}

});// ending onClickListener for one button

seven = (Button) findViewById(R.id.*seven*);

seven.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 7;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 7;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

eight = (Button) findViewById(R.id.*eight*);

eight.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 8;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 8;

}//end public void

setText();// this is displaying the if statement

}

});// ending onClickListener for one button

nine = (Button) findViewById(R.id.*nine*);

nine.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 9;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 9;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

zero = (Button) findViewById(R.id.*zero*);

zero.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

**if** (operation == "")

{

input1 += 0;

} **else** {// operation = + OR operation = \* ... etc.

input2 += 0;

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

// add, subtract, multiply, divide,

add = (Button) findViewById(R.id.*add*);

add.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

operation = "+";

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

subtract = (Button) findViewById(R.id.*subtract*);

subtract.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

operation = "-";

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

multiply = (Button) findViewById(R.id.*multiply*);

multiply.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

operation = "\*";

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

divide = (Button) findViewById(R.id.*divide*);

divide.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

operation = "/";

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

posNeg = (Button) findViewById(R.id.*posNeg*);

posNeg.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

operation = "-";

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

equal = (Button) findViewById(R.id.*equal*);

equal.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

input1 = math.operation(input1, operation, input2);

operation = "";

input2 = "";

setText();// this is displaying the if statement

**if** (input1.equals("NAN"))

{

input1 = "";

}

}//end public void

});// ending onClickListener for one button

clear = (Button) findViewById(R.id.*clear*);

clear.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v)

{

operation = "";//clear operations

input1 = "";//clears input1

input2 = "";//clears input2

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

decimal = (Button) findViewById(R.id.*decimal*);

decimal.setOnClickListener(**new** OnClickListener()

{

@Override

**public** **void** onClick(View v) {

**if** (operation == "" && !input1.contains("."))

{

input1 += ".";

} **else** **if** (!input2.contains(".")){// operation = + OR operation = \* ... etc.

input2 += ".";

}

setText();// this is displaying the if statement

}//end public void

});// ending onClickListener for one button

}// end on create method

// displaying my number and operation to another number on the screen

**public** **void** setText()

{

disp.setText(input1 + " " + operation + " " + input2);

}//end public void

@Override

**public** **boolean** onCreateOptionsMenu(Menu menu)

{

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.*main*, menu);

**return** **true**;

}//end public boolean

@Override

**public** **boolean** onOptionsItemSelected(MenuItem item)

{

// Handle action bar item clicks here. The action bar will

// automatically handle clicks on the Home/Up button, so long

// as you specify a parent activity in AndroidManifest.xml.

**int** id = item.getItemId();

**if** (id == R.id.*action\_settings*)

{

**return** **true**;

}

**return** **super**.onOptionsItemSelected(item);

}//end public boolean

}//end public class MainActivity extends ActionBarActivity