

# P#2: Kotlin Calculator and BMI Calculator Challenge!

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**Program:**

**Java Code:**

```
package com.example.bmi;

import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {

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

        EditText editTextWeight = findViewById(R.id.weight);
        EditText editTextHeight = findViewById(R.id.height);
        Button button = findViewById(R.id.btnSubmit);
        TextView textView = findViewById(R.id.result);

        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                float height =
Float.parseFloat(String.valueOf(editTextHeight.getText())) / 100;
                float weight =
Float.parseFloat(String.valueOf(editTextWeight.getText()));
                float bmi = weight / (height * height);
                textView.setText(String.valueOf(bmi));

                String bmiCondition;
                if (bmi < 18.5) {
                    bmiCondition = "Underweight";
                } else if (bmi >= 18.5 && bmi < 25) {
                    bmiCondition = "Normal weight";
                } else if (bmi >= 25 && bmi < 30) {
                    bmiCondition = "Overweight";
                }
            }
        });
    }
}
```

```

        } else {
            bmiCondition = "Obesity";
        }

        textView.setText(String.format("%.2f", bmi) + "\n" +
bmiCondition);
    }
    });
}
}
}

```

## XML Code:

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_gravity="center"
    android:padding="20dp"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <ImageView
        android:id="@+id/imageView4"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:src="@drawable/img1"
        android:scaleType="fitXY" />

    <RelativeLayout
        android:layout_width="391dp"
        android:layout_height="711dp"
        android:layout_alignParentTop="true"
        android:layout_alignParentBottom="true"
        android:layout_gravity="center"
        android:layout_marginTop="0dp"
        android:layout_marginBottom="0dp"
        android:orientation="vertical"
        android:padding="20dp"
        tools:context=".MainActivity">

        <com.google.android.material.textfield.TextInputLayout
            android:layout_width="wrap_content"
            android:layout_height="wrap_content">

            </com.google.android.material.textfield.TextInputLayout>

```

```
<com.google.android.material.textfield.TextInputLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content">

</com.google.android.material.textfield.TextInputLayout>

<TextView
    android:layout_width="268dp"
    android:layout_height="72dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="62dp"
    android:layout_marginTop="9dp"
    android:layout_marginEnd="21dp"
    android:layout_marginBottom="589dp"
    android:text="BMI CALCULATOR "
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="25sp"
    android:textStyle="bold" />

<com.google.android.material.textfield.TextInputEditText
    android:id="@+id/height"
    android:layout_width="191dp"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="102dp"
    android:layout_marginTop="64dp"
    android:layout_marginEnd="58dp"
    android:layout_marginBottom="526dp"
    android:hint="Enter height in CM"
    android:textColorHint="@color/white" />

<com.google.android.material.textfield.TextInputEditText
    android:id="@+id/weight"
    android:layout_width="190dp"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="101dp"
    android:layout_marginTop="121dp"
```

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        android:layout_marginEnd="60dp"
        android:layout_marginBottom="467dp"
        android:hint="Enter weight in KG"
        android:textColorHint="@color/white" />

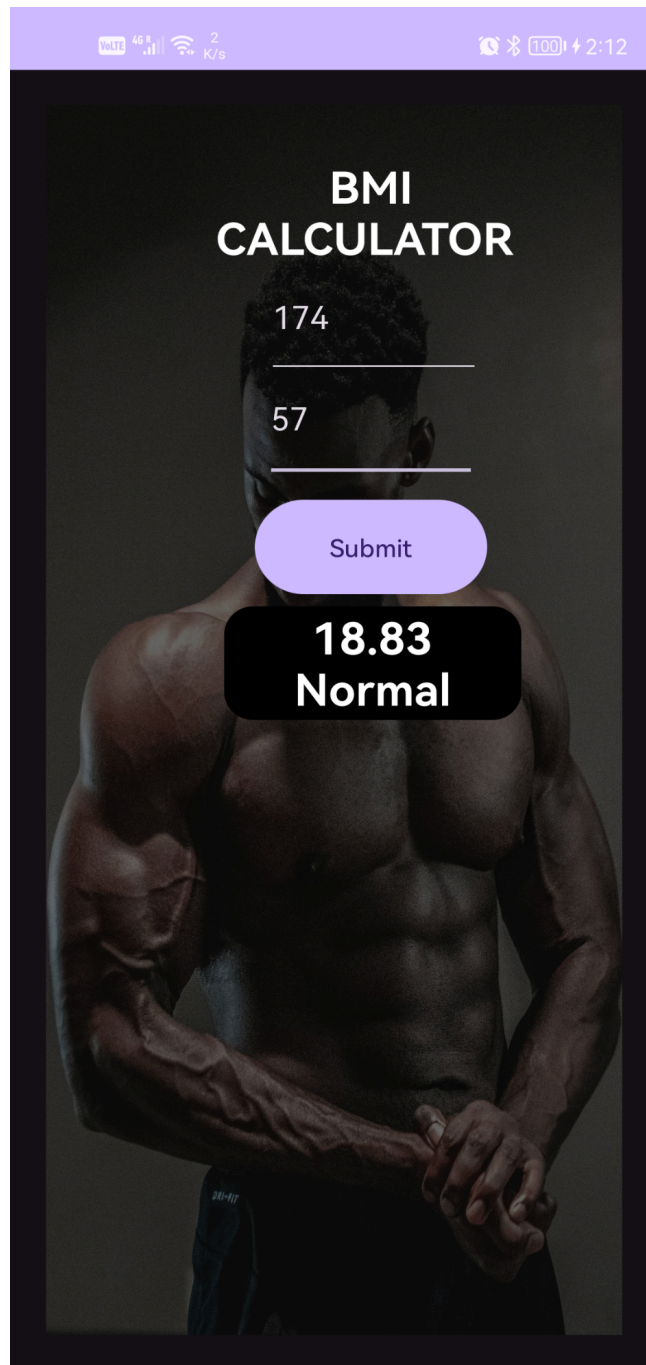
<Button
    android:id="@+id/btnSubmit"
    android:layout_width="201dp"
    android:layout_height="69dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="96dp"
    android:layout_marginTop="202dp"
    android:layout_marginEnd="55dp"
    android:layout_marginBottom="400dp"
    android:text="Submit" />

</RelativeLayout>
<com.google.android.material.textfield.TextInputLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content">
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content">
</com.google.android.material.textfield.TextInputLayout>

<TextView
    android:id="@+id/result"
    android:layout_width="236dp"
    android:layout_height="72dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_gravity="center"
    android:layout_marginStart="99dp"
    android:layout_marginTop="287dp"
    android:layout_marginEnd="56dp"
    android:layout_marginBottom="352dp"
    android:background="@drawable/rounded_background"
    android:textColor="@color/white"
    android:textAlignment="center"
    android:textSize="25sp"
    android:textStyle="bold" />
</RelativeLayout>

```

## Output Screen:

The image shows a mobile application interface for a BMI calculator. The background is a dark, high-contrast photograph of a muscular man's torso. At the top, there is a purple status bar with icons for cellular signal (4G+), Wi-Fi, battery level (100%), and time (2:12). The app title "BMI CALCULATOR" is centered in white. Below the title are two input fields: the first contains the number "174" and the second contains "57". A purple "Submit" button is positioned below the inputs. The result is displayed in a black rounded rectangle with the text "18.83" in large white font and "Normal" in smaller white font below it.

BMI  
CALCULATOR

174

57

Submit

**18.83**  
Normal