

Main Activity (Base Activity)

When we initialized our project, at that time by default an activity was created. This activity is called as **MainActivity**.

Here as per our project we can change the **MainActivity.java** as follows-

```
package com.professionaljk.cgpiisgpcalculator;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

    }
    public void calculateCGPI(View view){
        Intent intent = new Intent(this,CGPIActivity1.class);
        startActivity(intent);
    }
    public void calculateSGPI(View view){
        Intent intent = new Intent(this,SGPIActivity1.class);
        startActivity(intent);
    }
}
```

Also, make some changes as follows in **activity_main.xml**-

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/welcomeText"
        android:layout_width="240dp"
        android:layout_height="100dp"
        android:layout_marginTop="8dp"
        android:text="Welcome"
        android:textAlignment="center"
        android:textAppearance="@style/TextAppearance.AppCompat.Display1"
        android:textColor="#2196F3"
        android:textSize="60dp"
        app:fontFamily="cursive"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.17" />

    <Button
        android:id="@+id/cgpiCalculate"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```

        android:layout_marginStart="8dp"
        android:layout_marginLeft="8dp"
        android:layout_marginTop="8dp"
        android:layout_marginEnd="8dp"
        android:layout_marginRight="8dp"
        android:layout_marginBottom="8dp"
        android:background="#FFFFFF"
        android:onClick="calculateCGPI"
        android:text="CGPI"
        android:textColor="#009688"
        android:textSize="25dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/welcomeText"
        app:layout_constraintVertical_bias="0.333" />

<Button
    android:id="@+id/sgpiCalculate"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
    android:layout_marginLeft="8dp"
    android:layout_marginTop="8dp"
    android:layout_marginEnd="8dp"
    android:layout_marginRight="8dp"
    android:layout_marginBottom="8dp"
    android:background="#FFFFFF"
    android:onClick="calculateSGPI"
    android:text="SGPI"
    android:textColor="#009688"
    android:textSize="25dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/cgpiCalculate"
    app:layout_constraintVertical_bias="0.223" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Here, we have given two options as

- 1) CGPI: Where user will be able to calculate the average pointer and corresponding equivalent percentage.
- 2) SGPI: Where user will be able to calculate equivalent percentage of given pointer.

OUTPUT:

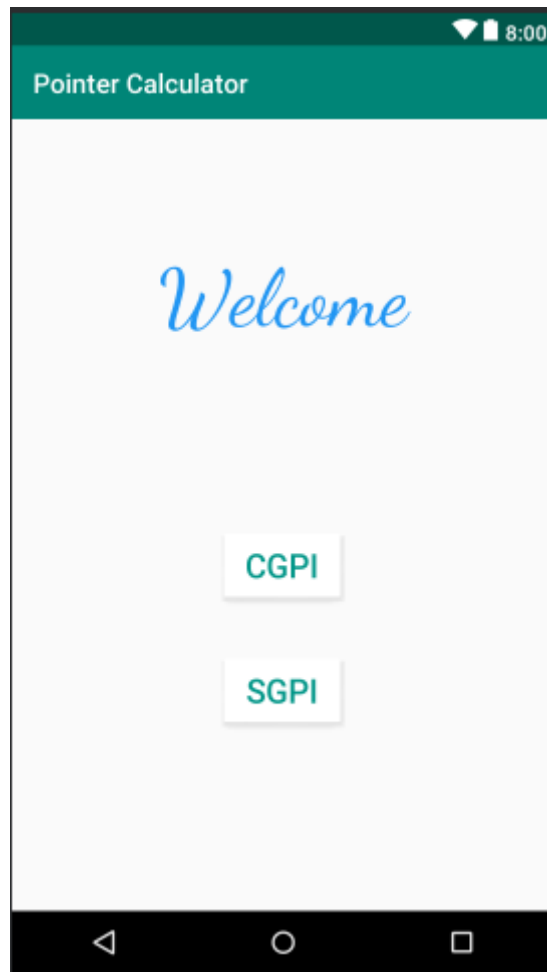


Fig. MainActivity