**Activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>  
<androidx.core.widget.NestedScrollView 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"  
 android:background="@color/cardview\_dark\_background">  
  
 <RelativeLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:layout\_marginBottom="20dp"  
 android:text="Unit Converter"  
 android:textColor="@color/white"  
 android:textSize="40sp" />  
  
  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/tv\_text"  
 android:layout\_centerInParent="true"  
 android:layout\_centerVertical="true"  
 android:layout\_marginTop="20dp"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="227dp"  
 android:gravity="center"  
 android:orientation="horizontal"  
 android:paddingTop="20dp"  
 android:paddingBottom="10dp"  
 android:weightSum="3">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_tmp"  
 android:layout\_width="100dp"  
 android:layout\_height="100dp"  
 app:cardCornerRadius="16dp">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/grey"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_tmp"  
 android:layout\_width="30dp"  
 android:layout\_height="30dp"  
 android:src="@drawable/temperature" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:text="Temperature"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_weight"  
 android:layout\_width="100dp"  
 android:layout\_height="100dp"  
 app:cardCornerRadius="16dp">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/grey"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_weight"  
 android:layout\_width="30dp"  
 android:layout\_height="30dp"  
 android:src="@drawable/weight" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:text="Weight"  
 android:textColor="@color/white"  
 android:textSize="16sp"  
 android:textStyle="bold" />  
  
 </LinearLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_length"  
 android:layout\_width="100dp"  
 android:layout\_height="100dp"  
 app:cardCornerRadius="16dp">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/grey"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_length"  
 android:layout\_width="30dp"  
 android:layout\_height="30dp"  
 android:src="@drawable/length" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:text="Length"  
 android:textColor="@color/white"  
 android:textSize="16sp"  
 android:textStyle="bold" />  
  
 </LinearLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="177dp"  
 android:gravity="center"  
 android:orientation="horizontal"  
 android:paddingTop="20dp"  
 android:paddingBottom="10dp"  
 android:weightSum="3">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_area"  
 android:layout\_width="100dp"  
 android:layout\_height="100dp"  
 app:cardCornerRadius="16dp">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/grey"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_area"  
 android:layout\_width="40dp"  
 android:layout\_height="38dp"  
 android:src="@drawable/area" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:text="Area"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_time"  
 android:layout\_width="100dp"  
 android:layout\_height="100dp"  
 app:cardCornerRadius="16dp">  
  
 <LinearLayout  
  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/grey"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_time"  
 android:layout\_width="30dp"  
 android:layout\_height="30dp"  
 android:src="@drawable/time" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:text="Time"  
 android:textColor="@color/white"  
 android:textSize="16sp"  
 android:textStyle="bold" />  
  
 </LinearLayout>  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_Volume"  
 android:layout\_width="100dp"  
 android:layout\_height="100dp"  
 app:cardCornerRadius="16dp">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/grey"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_volume"  
 android:layout\_width="30dp"  
 android:layout\_height="30dp"  
 android:src="@drawable/volume" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:text="Volume"  
 android:textColor="@color/white"  
 android:textSize="16sp"  
 android:textStyle="bold" />  
  
 </LinearLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="3">  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 </RelativeLayout>  
  
</androidx.core.widget.NestedScrollView>

**MainActivity.java**

package com.example.unitconverter;  
  
import android.annotation.SuppressLint;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
public class MainActivity extends AppCompatActivity {  
  
 CardView cv\_tmp;  
 CardView cv\_weight;  
 CardView cv\_length;  
 CardView cv\_volume;  
 CardView cv\_time;  
 CardView cv\_area;  
  
 @SuppressLint("WrongViewCast")  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
  
 cv\_tmp = findViewById(R.id.cv\_tmp);  
 cv\_weight = findViewById(R.id.cv\_weight);  
 cv\_length = findViewById(R.id.cv\_length);  
 cv\_area =findViewById(R.id.cv\_area);  
 cv\_time =findViewById(R.id.cv\_time);  
 cv\_volume=findViewById(R.id.cv\_Volume);  
 cv\_tmp.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 startActivity(new Intent(MainActivity.this, temp\_cal.class));  
 }  
 });  
 cv\_weight.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 startActivity(new Intent(MainActivity.this, weight\_cal.class));  
 }  
 });  
 cv\_length.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 startActivity(new Intent(MainActivity.this, length\_cal.class));  
 }  
 });  
 cv\_time.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 startActivity(new Intent(MainActivity.this, time\_cal.class));  
 }  
 });  
 cv\_area.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 startActivity(new Intent(MainActivity.this, area\_cal.class));  
 }  
 });  
 cv\_volume.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 startActivity(new Intent(MainActivity.this, volume\_cal.class));  
 }  
 });  
  
 }  
}

**activity\_splash\_screen.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/black"  
 android:gravity="center"  
 android:orientation="vertical"  
 tools:context=".SplashScreen">  
  
 <ImageView  
 android:layout\_width="200dp"  
 android:layout\_height="200dp"  
 android:src="@drawable/icon" />  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="70dp"  
 android:text="Unit Converter"  
 android:textAlignment="center"  
 android:textColor="@color/textColor"  
 android:textSize="32sp" />  
  
  
</LinearLayout>

**SplashScreen.java**

package com.example.unitconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.os.Handler;  
  
public class SplashScreen extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_splash\_screen);  
  
 new Handler().postDelayed(new Runnable() {  
 @Override  
 public void run() {  
 startActivity(new Intent(SplashScreen.this, MainActivity.class));  
 }  
 },2000);  
 }  
}

**activity\_area\_cal.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout 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:id="@+id/temp\_relativeLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/cardview\_dark\_background"  
 tools:context=".area\_cal">  
  
 <LinearLayout  
 android:id="@+id/ll\_heading"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="210dp"  
 android:layout\_height="91dp"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:gravity="center"  
 android:text="AREA"  
 android:textColor="@color/white"  
 android:textSize="60sp" />  
  
 <ImageView  
 android:layout\_width="103dp"  
 android:layout\_height="90dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="40dp"  
 android:src="@drawable/area" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/editTextLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_below="@id/ll\_heading"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="From"  
 android:inputType="phone"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="centimeter"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="To"  
 android:enabled="false"  
 android:inputType="none"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="meter"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/listViewLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editTextLinearLayout"  
 android:layout\_marginTop="40dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/fromUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_fromUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_fromUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/toUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_selectToUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_toUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_toUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/listViewLinearLayout"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="125dp"  
 android:layout\_height="75dp"  
 android:background="@color/convertUnit"  
 android:padding="8dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/btn\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Convert"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
  
</RelativeLayout>

**Area\_cal.java**

package com.example.unitconverter;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.RelativeLayout;  
import android.widget.TextView;  
  
import java.util.Arrays;  
  
public class area\_cal extends AppCompatActivity {  
  
 CardView cv\_fromUnit, cv\_toUnit, cv\_convert;  
 RelativeLayout mCLayout;  
 String fromUnit = "";  
 String toUnit = "";  
 TextView tv\_fromUnit, tv\_toUnit;  
 EditText et\_fromUnit, et\_toUnit;  
 final String[] values = new String[]{  
 " ",  
 "Square Meter",  
 "Square Kilometer",  
 "Square Hectometer",  
 "Square Dekameter",  
 "Square Decimeter", "Square Centimeter"  
 };  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_area\_cal*);  
  
 cv\_fromUnit = findViewById(R.id.*fromUnit*);  
 cv\_toUnit = findViewById(R.id.*toUnit*);  
 cv\_convert = findViewById(R.id.*cv\_convert*);  
  
 mCLayout = findViewById(R.id.*temp\_relativeLayout*);  
  
 tv\_fromUnit = findViewById(R.id.*tv\_fromUnit*);  
 tv\_toUnit = findViewById(R.id.*tv\_toUnit*);  
  
 tv\_fromUnit.setText(values[0]);  
 tv\_toUnit.setText(values[0]);  
  
 et\_fromUnit = findViewById(R.id.*et\_fromUnit*);  
 et\_toUnit = findViewById(R.id.*et\_toUnit*);  
  
 cv\_convert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String tempInput = et\_fromUnit.getText().toString();  
 if (tempInput.equals("") || tempInput == null) {  
 et\_fromUnit.setError("Please enter some value");  
 } else {  
 if (tv\_fromUnit.getText().toString().equals(values[0])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(celciusToFarenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(celciusToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(celciusToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(celciusToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(celciusToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[1])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(fahrenheitToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(fahrenheitToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(fahrenheitToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(fahrenheitToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(fahrenheitToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[2])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(kelvinToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(kelvinToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(kelvinToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(kelvinToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(kelvinToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[3])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(rankineToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(rankineToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(rankineToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(rankineToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(rankineToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[4])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(newtonToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(newtonToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(newtonToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(newtonToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(newtonToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[5])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(delisleToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(delisleToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(delisleToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(delisleToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(delisleToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(tempInput);  
 }  
 }  
 }  
 }  
 });  
  
 cv\_toUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(area\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Square Meter",  
 "Square Kilometer",  
 "Square Hectometer",  
 "Square Dekameter",  
 "Square Decimeter", "Square Centimeter"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.*asList*(flowers).get(i);  
 toUnit = selectedItem;  
 tv\_toUnit.setText(toUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 cv\_fromUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(area\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Square Meter",  
 "Square Kilometer",  
 "Square Hectometer",  
 "Square Dekameter",  
 "Square Decimeter", "Square Centimeter"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.*asList*(flowers).get(i);  
 fromUnit = selectedItem;  
 tv\_fromUnit.setText(fromUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
 }  
  
 //celcius  
 private String celciusToKelvin(double celsius) {  
 double kelvin = celsius/1e+6;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String celciusToRankine(double celsius) {  
 double rankine = celsius /10000;  
 return String.*valueOf*(rankine);  
 }  
  
 private String celciusToNewton(double celsius) {  
 double newton = celsius /100;  
 return String.*valueOf*(newton);  
 }  
  
 private String celciusToDelisle(double celsius) {  
 double delisle = celsius\*100;  
 return String.*valueOf*(delisle);  
 }  
  
 private String celciusToFarenheit(double celsius) {  
 double fahrenheit = celsius\* 10000;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 //fahrenheit  
 private String fahrenheitToKelvin(double fahrenheit) {  
 double kelvin = fahrenheit\*100;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String fahrenheitToRankine(double fahrenheit) {  
 double rankine = fahrenheit\* 10000;  
 return String.*valueOf*(rankine);  
 }  
  
 private String fahrenheitToNewton(double fahrenheit) {  
 double newton = fahrenheit\*1e+8;  
 return String.*valueOf*(newton);  
 }  
  
 private String fahrenheitToDelisle(double fahrenheit) {  
 double delisle = fahrenheit\*1e+10;  
 return String.*valueOf*(delisle);  
 }  
  
 private String fahrenheitToCelcius(double fahrenheit) {  
 double celcius = fahrenheit\*1e+6;  
 return String.*valueOf*(celcius);  
 }  
  
 //Kelvin  
 private String kelvinToRankine(double kelvin) {  
 double rankine = kelvin \* 100;  
 return String.*valueOf*(rankine);  
 }  
  
 private String kelvinToNewton(double kelvin) {  
 double newton = kelvin\*1e+6;  
 return String.*valueOf*(newton);  
 }  
  
 private String kelvinToDelisle(double kelvin) {  
 double delisle = kelvin\*1e+8;  
 return String.*valueOf*(delisle);  
 }  
  
 private String kelvinToCelcius(double kelvin) {  
 double celcius = kelvin\* 10000;  
 return String.*valueOf*(celcius);  
 }  
  
 private String kelvinToFahrenheit(double kelvin) {  
 double fahrenheit = kelvin/100;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 //Rankine  
 private String rankineToNewton(double rankine) {  
 double newton = rankine\*10000;  
 return String.*valueOf*(newton);  
 }  
  
 private String rankineToDelisle(double rankine) {  
 double delisle = rankine\*1e+6;  
 return String.*valueOf*(delisle);  
 }  
  
 private String rankineToCelcius(double rankine) {  
 double celcius = rankine\*100;  
 return String.*valueOf*(celcius);  
 }  
  
 private String rankineToFahrenheit(double rankine) {  
 double fahrenheit = rankine /10000;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String rankineToKelvin(double rankine) {  
 double kelvin = rankine /100;  
 return String.*valueOf*(kelvin);  
 }  
  
 //Newton  
 private String newtonToDelisle(double newton) {  
 double delisle = newton\*100;  
 return String.*valueOf*(delisle);  
 }  
  
 private String newtonToCelcius(double newton) {  
 double celcius = newton / 100 ;  
 return String.*valueOf*(celcius);  
 }  
  
 private String newtonToFahrenheit(double newton) {  
 double fahrenheit = newton /1e+8;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String newtonToKelvin(double newton) {  
 double kelvin = newton/1e+6;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String newtonToRankine(double newton) {  
 double rankine = newton /10000;  
 return String.*valueOf*(rankine);  
 }  
  
 //Delisle  
 private String delisleToCelcius(double delisle) {  
 double celcius = delisle/10000;  
 return String.*valueOf*(celcius);  
 }  
  
 private String delisleToFahrenheit(double delisle) {  
 double fahrenheit = delisle/1e+10;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String delisleToKelvin(double delisle) {  
 double kelvin = delisle/1e+8;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String delisleToRankine(double delisle) {  
 double rankine = delisle/1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String delisleToNewton(double delisle) {  
 double newton = delisle/100;  
 return String.*valueOf*(newton);  
 }  
}

**acivity\_length\_cal.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout 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:id="@+id/temp\_relativeLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/cardview\_dark\_background"  
 tools:context=".area\_cal">  
  
 <LinearLayout  
 android:id="@+id/ll\_heading"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="210dp"  
 android:layout\_height="91dp"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:gravity="center"  
 android:text="AREA"  
 android:textColor="@color/white"  
 android:textSize="60sp" />  
  
 <ImageView  
 android:layout\_width="103dp"  
 android:layout\_height="90dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="40dp"  
 android:src="@drawable/area" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/editTextLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_below="@id/ll\_heading"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="From"  
 android:inputType="phone"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="centimeter"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="To"  
 android:enabled="false"  
 android:inputType="none"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="meter"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/listViewLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editTextLinearLayout"  
 android:layout\_marginTop="40dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/fromUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_fromUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_fromUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/toUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_selectToUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_toUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_toUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/listViewLinearLayout"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="125dp"  
 android:layout\_height="75dp"  
 android:background="@color/convertUnit"  
 android:padding="8dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/btn\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Convert"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
  
</RelativeLayout>

**length\_cal.java**

package com.example.unitconverter;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.RelativeLayout;  
import android.widget.TextView;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import java.util.Arrays;  
  
public class length\_cal extends AppCompatActivity {  
 CardView cv\_fromUnit, cv\_toUnit, cv\_convert;  
 RelativeLayout mCLayout;  
 String fromUnit = "";  
 String toUnit = "";  
 TextView tv\_fromUnit, tv\_toUnit;  
 EditText et\_fromUnit, et\_toUnit;  
 final String[] values = new String[]{  
 " ",  
 "Meter",  
 "Exa Meter",  
 "Peta Meter",  
 "Tera Meter",  
 "Giga Meter", "Mega Meter"  
 };  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_length\_cal);  
  
 cv\_fromUnit = findViewById(R.id.fromUnit);  
 cv\_toUnit = findViewById(R.id.toUnit);  
 cv\_convert = findViewById(R.id.cv\_convert);  
  
 mCLayout = findViewById(R.id.temp\_relativeLayout);  
  
 tv\_fromUnit = findViewById(R.id.tv\_fromUnit);  
 tv\_toUnit = findViewById(R.id.tv\_toUnit);  
  
 tv\_fromUnit.setText(values[0]);  
 tv\_toUnit.setText(values[0]);  
  
 et\_fromUnit = findViewById(R.id.et\_fromUnit);  
 et\_toUnit = findViewById(R.id.et\_toUnit);  
  
 cv\_convert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String tempInput = et\_fromUnit.getText().toString();  
 if (tempInput.equals("") || tempInput == null) {  
 et\_fromUnit.setError("Please enter some value");  
 } else {  
 if (tv\_fromUnit.getText().toString().equals(values[0])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(celciusToFarenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(celciusToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(celciusToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(celciusToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(celciusToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[1])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(fahrenheitToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(fahrenheitToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(fahrenheitToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(fahrenheitToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(fahrenheitToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[2])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(kelvinToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(kelvinToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(kelvinToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(kelvinToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(kelvinToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[3])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(rankineToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(rankineToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(rankineToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(rankineToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(rankineToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[4])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(newtonToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(newtonToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(newtonToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(newtonToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(newtonToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[5])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(delisleToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(delisleToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(delisleToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(delisleToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(delisleToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(tempInput);  
 }  
 }  
 }  
 }  
 });  
  
 cv\_toUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(length\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Meter",  
 "Exa Meter",  
 "Peta Meter",  
 "Tera Meter",  
 "Giga Meter", "Mega Meter"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.asList(flowers).get(i);  
 toUnit = selectedItem;  
 tv\_toUnit.setText(toUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 cv\_fromUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(length\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Meter",  
 "Exa Meter",  
 "Peta Meter",  
 "Tera Meter",  
 "Giga Meter", "Mega Meter"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.asList(flowers).get(i);  
 fromUnit = selectedItem;  
 tv\_fromUnit.setText(fromUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 }  
  
 //celcius  
 private String celciusToKelvin(double celsius) {  
 double kelvin = celsius / 1e+18;  
 return String.valueOf(kelvin);  
 }  
  
 private String celciusToRankine(double celsius) {  
 double rankine = celsius / 1e+15;  
 return String.valueOf(rankine);  
 }  
  
 private String celciusToNewton(double celsius) {  
 double newton = celsius / 1e+12;  
 return String.valueOf(newton);  
 }  
  
 private String celciusToDelisle(double celsius) {  
 double delisle = celsius / 1e+9;  
 return String.valueOf(delisle);  
 }  
  
 private String celciusToFarenheit(double celsius) {  
 double fahrenheit = celsius / 1e+6;  
 return String.valueOf(fahrenheit);  
 }  
  
 //fahrenheit  
 private String fahrenheitToKelvin(double fahrenheit) {  
 double kelvin = fahrenheit \* 1000;  
 return String.valueOf(kelvin);  
 }  
  
 private String fahrenheitToRankine(double fahrenheit) {  
 double rankine = fahrenheit \* 1e+6;  
 return String.valueOf(rankine);  
 }  
  
 private String fahrenheitToNewton(double fahrenheit) {  
 double newton = fahrenheit \* 1e+9;  
 return String.valueOf(newton);  
 }  
  
 private String fahrenheitToDelisle(double fahrenheit) {  
 double delisle = fahrenheit \* 1e+12;  
 return String.valueOf(delisle);  
 }  
  
 private String fahrenheitToCelcius(double fahrenheit) {  
 double celcius = fahrenheit \* 1e+18;  
 return String.valueOf(celcius);  
 }  
  
 //Kelvin  
 private String kelvinToRankine(double kelvin) {  
 double rankine = kelvin \* 1000;  
 return String.valueOf(rankine);  
 }  
  
 private String kelvinToNewton(double kelvin) {  
 double newton = kelvin \* 1e+6;  
 return String.valueOf(newton);  
 }  
  
 private String kelvinToDelisle(double kelvin) {  
 double delisle = kelvin \* 1e+9;  
 return String.valueOf(delisle);  
 }  
  
 private String kelvinToCelcius(double kelvin) {  
 double celcius = kelvin \* 1e+15;  
 return String.valueOf(celcius);  
 }  
  
 private String kelvinToFahrenheit(double kelvin) {  
 double fahrenheit = kelvin / 1000;  
 return String.valueOf(fahrenheit);  
 }  
  
 //Rankine  
 private String rankineToNewton(double rankine) {  
 double newton = rankine \* 1000;  
 return String.valueOf(newton);  
 }  
  
 private String rankineToDelisle(double rankine) {  
 double delisle = rankine \* 1e+6;  
 return String.valueOf(delisle);  
 }  
  
 private String rankineToCelcius(double rankine) {  
 double celcius = rankine \* 1e+12;  
 return String.valueOf(celcius);  
 }  
  
 private String rankineToFahrenheit(double rankine) {  
 double fahrenheit = rankine / 1e+6;  
 return String.valueOf(fahrenheit);  
 }  
  
 private String rankineToKelvin(double rankine) {  
 double kelvin = rankine / 1000;  
 return String.valueOf(kelvin);  
 }  
  
 //Newton  
 private String newtonToDelisle(double newton) {  
 double delisle = newton \* 1000;  
 return String.valueOf(delisle);  
 }  
  
 private String newtonToCelcius(double newton) {  
 double celcius = newton \* 1e+9;  
 return String.valueOf(celcius);  
 }  
  
 private String newtonToFahrenheit(double newton) {  
 double fahrenheit = newton / 1e+9;  
 return String.valueOf(fahrenheit);  
 }  
  
 private String newtonToKelvin(double newton) {  
 double kelvin = newton / 1e+6;  
 return String.valueOf(kelvin);  
 }  
  
 private String newtonToRankine(double newton) {  
 double rankine = newton \* 1000;  
 return String.*valueOf*(rankine);  
 }  
  
 //Delisle  
 private String delisleToCelcius(double delisle) {  
 double celcius = delisle \* 1e+6;  
 return String.*valueOf*(celcius);  
 }  
  
 private String delisleToFahrenheit(double delisle) {  
 double fahrenheit = delisle / 1e+12;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String delisleToKelvin(double delisle) {  
 double kelvin = delisle / 1e+9;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String delisleToRankine(double delisle) {  
 double rankine = delisle / 1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String delisleToNewton(double delisle) {  
 double newton = delisle / 1000;  
 return String.*valueOf*(newton);  
 }  
  
}

**activity\_temp\_cal.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout 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:id="@+id/temp\_relativeLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/cardview\_dark\_background"  
 tools:context=".temp\_cal">  
  
 <LinearLayout  
 android:id="@+id/ll\_heading"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="91dp"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:gravity="center"  
 android:text="TEMPERATURE"  
 android:textColor="@color/white"  
 android:textSize="30sp" />  
  
 <ImageView  
 android:layout\_width="78dp"  
 android:layout\_height="81dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="40dp"  
 android:src="@drawable/temperature" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/editTextLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_below="@id/ll\_heading"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="From"  
 android:inputType="phone"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Celcius"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="To"  
 android:enabled="false"  
 android:inputType="none"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Fahrenheit"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/listViewLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editTextLinearLayout"  
 android:layout\_marginTop="40dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/fromUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_fromUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_fromUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/toUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_selectToUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_toUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_toUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/listViewLinearLayout"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="128dp"  
 android:layout\_height="69dp"  
 android:background="@color/convertUnit"  
 android:padding="8dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/btn\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Convert"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
  
</RelativeLayout>

**temp\_cal.java**

package com.example.unitconverter;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.RelativeLayout;  
import android.widget.TextView;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import java.util.Arrays;  
  
public class temp\_cal extends AppCompatActivity {  
  
 CardView cv\_fromUnit, cv\_toUnit, cv\_convert;  
 RelativeLayout mCLayout;  
 String fromUnit = "";  
 String toUnit = "";  
 TextView tv\_fromUnit, tv\_toUnit;  
 EditText et\_fromUnit, et\_toUnit;  
 final String[] values = new String[]{  
 "",  
 "Celcius",  
 "Fahrenheit",  
 "Kelvin",  
 "Rankine",  
 "Newton", "Delisle"  
 };  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_temp\_cal);  
  
 cv\_fromUnit = findViewById(R.id.fromUnit);  
 cv\_toUnit = findViewById(R.id.toUnit);  
 cv\_convert = findViewById(R.id.cv\_convert);  
  
 mCLayout = findViewById(R.id.temp\_relativeLayout);  
  
 tv\_fromUnit = findViewById(R.id.tv\_fromUnit);  
 tv\_toUnit = findViewById(R.id.tv\_toUnit);  
  
 tv\_fromUnit.setText(values[0]);  
 tv\_toUnit.setText(values[0]);  
  
 et\_fromUnit = findViewById(R.id.et\_fromUnit);  
 et\_toUnit = findViewById(R.id.et\_toUnit);  
  
 cv\_convert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String tempInput = et\_fromUnit.getText().toString();  
 if (tempInput.equals("") || tempInput == null) {  
 et\_fromUnit.setError("Please enter some value");  
 } else {  
 if (tv\_fromUnit.getText().toString().equals(values[0])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(celciusToFarenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(celciusToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(celciusToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(celciusToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(celciusToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[1])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(fahrenheitToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(fahrenheitToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(fahrenheitToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(fahrenheitToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(fahrenheitToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[2])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(kelvinToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(kelvinToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(kelvinToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(kelvinToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(kelvinToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[3])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(rankineToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(rankineToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(rankineToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(rankineToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(rankineToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[4])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(newtonToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(newtonToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(newtonToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(newtonToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(newtonToDelisle(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[5])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(delisleToCelcius(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(delisleToFahrenheit(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(delisleToKelvin(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(delisleToRankine(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(delisleToNewton(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(tempInput);  
 }  
 }  
 }  
 }  
 });  
  
 cv\_toUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(temp\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Celcius",  
 "Fahrenheit",  
 "Kelvin",  
 "Rankine",  
 "Newton", "Delisle"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.asList(flowers).get(i);  
 toUnit = selectedItem;  
 tv\_toUnit.setText(toUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 cv\_fromUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(temp\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Celcius",  
 "Fahrenheit",  
 "Kelvin",  
 "Rankine",  
 "Newton", "Delisle"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.asList(flowers).get(i);  
 fromUnit = selectedItem;  
 tv\_fromUnit.setText(fromUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 }  
  
 //celcius  
 private String celciusToKelvin(double celsius) {  
 double kelvin = celsius + 273.15;  
 return String.valueOf(kelvin);  
 }  
  
 private String celciusToRankine(double celsius) {  
 double rankine = celsius \* 1.8 + 32 + 459.67;  
 return String.valueOf(rankine);  
 }  
  
 private String celciusToNewton(double celsius) {  
 double newton = celsius \* 0.33000;  
 return String.valueOf(newton);  
 }  
  
 private String celciusToDelisle(double celsius) {  
 double delisle = celsius \* 0.33000;  
 return String.valueOf(delisle);  
 }  
  
 private String celciusToFarenheit(double celsius) {  
 double fahrenheit = (celsius \* 9 / 5) + 32;  
 return String.valueOf(fahrenheit);  
 }  
  
 //fahrenheit  
 private String fahrenheitToKelvin(double fahrenheit) {  
 double kelvin = 273.5 + ((fahrenheit - 32.0) \* (5.0 / 9.0));  
 return String.valueOf(kelvin);  
 }  
  
 private String fahrenheitToRankine(double fahrenheit) {  
 double rankine = fahrenheit + 459.67;  
 return String.valueOf(rankine);  
 }  
  
 private String fahrenheitToNewton(double fahrenheit) {  
 double newton = (fahrenheit - 32) \* 0.18333;  
 return String.valueOf(newton);  
 }  
  
 private String fahrenheitToDelisle(double fahrenheit) {  
 double delisle = (212 - fahrenheit) \* 5 / 6;  
 return String.valueOf(delisle);  
 }  
  
 private String fahrenheitToCelcius(double fahrenheit) {  
 double celcius = (fahrenheit - 32) \* 5 / 9;  
 return String.valueOf(celcius);  
 }  
  
 //Kelvin  
 private String kelvinToRankine(double kelvin) {  
 double rankine = kelvin \* 9 / 5;  
 return String.valueOf(rankine);  
 }  
  
 private String kelvinToNewton(double kelvin) {  
 double newton = (kelvin - 273.15) \* 0.33000;  
 return String.valueOf(newton);  
 }  
  
 private String kelvinToDelisle(double kelvin) {  
 double delisle = (373.15 - kelvin) \* 3 / 2;  
 return String.valueOf(delisle);  
 }  
  
 private String kelvinToCelcius(double kelvin) {  
 double celcius = kelvin - 273.15;  
 return String.valueOf(celcius);  
 }  
  
 private String kelvinToFahrenheit(double kelvin) {  
 double fahrenheit = (kelvin - 273.15) \* 1.8 + 32;  
 return String.valueOf(fahrenheit);  
 }  
  
 //Rankine  
 private String rankineToNewton(double rankine) {  
 double newton = (rankine - 491.67) \* 0.18333;  
 return String.valueOf(newton);  
 }  
  
 private String rankineToDelisle(double rankine) {  
 double delisle = (671.67 - rankine) \* 5 / 6;  
 return String.valueOf(delisle);  
 }  
  
 private String rankineToCelcius(double rankine) {  
 double celcius = (rankine - 491.67) \* 5 / 9;  
 return String.valueOf(celcius);  
 }  
  
 private String rankineToFahrenheit(double rankine) {  
 double fahrenheit = rankine - 459.67;  
 return String.valueOf(fahrenheit);  
 }  
  
 private String rankineToKelvin(double rankine) {  
 double kelvin = rankine \* 5 / 9;  
 return String.valueOf(kelvin);  
 }  
  
 //Newton  
 private String newtonToDelisle(double newton) {  
 double delisle = (33 - newton) \* 50 / 11;  
 return String.valueOf(delisle);  
 }  
  
 private String newtonToCelcius(double newton) {  
 double celcius = newton \* 100 / 33;  
 return String.valueOf(celcius);  
 }  
  
 private String newtonToFahrenheit(double newton) {  
 double fahrenheit = newton \* 60 / 11 + 32;  
 return String.valueOf(fahrenheit);  
 }  
  
 private String newtonToKelvin(double newton) {  
 double kelvin = newton \* 100 / 33 + 273.15;  
 return String.valueOf(kelvin);  
 }  
  
 private String newtonToRankine(double newton) {  
 double rankine = newton \* 60 / 11 + 491.67;  
 return String.*valueOf*(rankine);  
 }  
  
 //Delisle  
 private String delisleToCelcius(double delisle) {  
 double celcius = 100 - delisle \* 2 / 3;  
 return String.valueOf(celcius);  
 }  
  
 private String delisleToFahrenheit(double delisle) {  
 double fahrenheit = 212 - delisle \* 6 / 5;  
 return String.valueOf(fahrenheit);  
 }  
  
 private String delisleToKelvin(double delisle) {  
 double kelvin = 373.15 - delisle \* 2 / 3;  
 return String.valueOf(kelvin);  
 }  
  
 private String delisleToRankine(double delisle) {  
 double rankine = 671.67 - delisle \* 6 / 5;  
 return String.valueOf(rankine);  
 }  
  
 private String delisleToNewton(double delisle) {  
 double newton = 33 - delisle \* 11 / 50;  
 return String.valueOf(newton);  
 }  
  
}

**activity\_time\_cal.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout 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:id="@+id/temp\_relativeLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/cardview\_dark\_background"  
 tools:context=".time\_cal">  
  
 <LinearLayout  
 android:id="@+id/ll\_heading"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="91dp"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:gravity="center"  
 android:text=" TIME"  
 android:textColor="@color/white"  
 android:textSize="55sp" />  
  
 <ImageView  
 android:layout\_width="90dp"  
 android:layout\_height="87dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="40dp"  
 android:src="@drawable/time" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/editTextLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_below="@id/ll\_heading"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="From"  
 android:inputType="phone"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="second"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="To"  
 android:enabled="false"  
 android:inputType="none"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="minute"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/listViewLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editTextLinearLayout"  
 android:layout\_marginTop="40dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/fromUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_fromUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_fromUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/toUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_selectToUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_toUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_toUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/listViewLinearLayout"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="120dp"  
 android:layout\_height="match\_parent"  
 android:background="@color/convertUnit"  
 android:padding="8dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/btn\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Convert"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
  
</RelativeLayout>

**time\_cal.java**

package com.example.unitconverter;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.RelativeLayout;  
import android.widget.TextView;  
  
import java.util.Arrays;  
  
public class time\_cal extends AppCompatActivity {  
  
 CardView cv\_fromUnit, cv\_toUnit, cv\_convert;  
 RelativeLayout mCLayout;  
 String fromUnit = "";  
 String toUnit = "";  
 TextView tv\_fromUnit, tv\_toUnit;  
 EditText et\_fromUnit, et\_toUnit;  
 final String[] values = new String[]{  
 "",  
 "Second",  
 "Millisecond",  
 "Microsecond",  
 "Nanosecond",  
 "Picosecond", "Femtosecond"  
 };  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_time\_cal*);  
  
 cv\_fromUnit = findViewById(R.id.*fromUnit*);  
 cv\_toUnit = findViewById(R.id.*toUnit*);  
 cv\_convert = findViewById(R.id.*cv\_convert*);  
  
 mCLayout = findViewById(R.id.*temp\_relativeLayout*);  
  
 tv\_fromUnit = findViewById(R.id.*tv\_fromUnit*);  
 tv\_toUnit = findViewById(R.id.*tv\_toUnit*);  
  
 tv\_fromUnit.setText(values[0]);  
 tv\_toUnit.setText(values[0]);  
  
 et\_fromUnit = findViewById(R.id.*et\_fromUnit*);  
 et\_toUnit = findViewById(R.id.*et\_toUnit*);  
  
 cv\_convert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String tempInput = et\_fromUnit.getText().toString();  
 if (tempInput.equals("") || tempInput == null) {  
 et\_fromUnit.setError("Please enter some value");  
 } else {  
 if (tv\_fromUnit.getText().toString().equals(values[0])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(celciusToFarenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(celciusToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(celciusToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(celciusToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(celciusToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[1])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(fahrenheitToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(fahrenheitToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(fahrenheitToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(fahrenheitToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(fahrenheitToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[2])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(kelvinToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(kelvinToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(kelvinToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(kelvinToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(kelvinToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[3])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(rankineToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(rankineToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(rankineToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(rankineToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(rankineToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[4])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(newtonToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(newtonToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(newtonToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(newtonToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(newtonToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[5])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(delisleToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(delisleToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(delisleToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(delisleToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(delisleToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(tempInput);  
 }  
 }  
 }  
 }  
 });  
  
 cv\_toUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(time\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Second",  
 "Millisecond",  
 "Microsecond",  
 "Nanosecond",  
 "Picosecond", "Femtosecond"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.*asList*(flowers).get(i);  
 toUnit = selectedItem;  
 tv\_toUnit.setText(toUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 cv\_fromUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(time\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Second",  
 "Millisecond",  
 "Microsecond",  
 "Nanosecond",  
 "Picosecond", "Femtosecond"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.*asList*(flowers).get(i);  
 fromUnit = selectedItem;  
 tv\_fromUnit.setText(fromUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 }  
  
 //celcius  
 private String celciusToKelvin(double celsius) {  
 double kelvin = celsius \*1000;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String celciusToRankine(double celsius) {  
 double rankine = celsius \*1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String celciusToNewton(double celsius) {  
 double newton = celsius \* 1e+9;  
 return String.*valueOf*(newton);  
 }  
  
 private String celciusToDelisle(double celsius) {  
 double delisle = celsius \*1e+12;  
 return String.*valueOf*(delisle);  
 }  
  
 private String celciusToFarenheit(double celsius) {  
 double fahrenheit = celsius\*1e+15;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 //fahrenheit  
 private String fahrenheitToKelvin(double fahrenheit) {  
 double kelvin = fahrenheit\*1000;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String fahrenheitToRankine(double fahrenheit) {  
 double rankine = fahrenheit\*1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String fahrenheitToNewton(double fahrenheit) {  
 double newton = fahrenheit\*1e+9;  
 return String.*valueOf*(newton);  
 }  
  
 private String fahrenheitToDelisle(double fahrenheit) {  
 double delisle = fahrenheit\*1e+12;  
 return String.*valueOf*(delisle);  
 }  
  
 private String fahrenheitToCelcius(double fahrenheit) {  
 double celcius = fahrenheit/1000;  
 return String.*valueOf*(celcius);  
 }  
  
 //Kelvin  
 private String kelvinToRankine(double kelvin) {  
 double rankine = kelvin \* 1000;  
 return String.*valueOf*(rankine);  
 }  
  
 private String kelvinToNewton(double kelvin) {  
 double newton = kelvin\*1e+6;  
 return String.*valueOf*(newton);  
 }  
  
 private String kelvinToDelisle(double kelvin) {  
 double delisle = kelvin\*1e+9;  
 return String.*valueOf*(delisle);  
 }  
  
 private String kelvinToCelcius(double kelvin) {  
 double celcius = kelvin /1e+6;  
 return String.*valueOf*(celcius);  
 }  
  
 private String kelvinToFahrenheit(double kelvin) {  
 double fahrenheit = kelvin/1000;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 //Rankine  
 private String rankineToNewton(double rankine) {  
 double newton = rankine\*1000;  
 return String.*valueOf*(newton);  
 }  
  
 private String rankineToDelisle(double rankine) {  
 double delisle = rankine\*1e+6;  
 return String.*valueOf*(delisle);  
 }  
  
 private String rankineToCelcius(double rankine) {  
 double celcius = rankine/ 1e+9;  
 return String.*valueOf*(celcius);  
 }  
  
 private String rankineToFahrenheit(double rankine) {  
 double fahrenheit = rankine/ 1e+6;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String rankineToKelvin(double rankine) {  
 double kelvin = rankine /1000;  
 return String.*valueOf*(kelvin);  
 }  
  
 //Newton  
 private String newtonToDelisle(double newton) {  
 double delisle = newton\*1000;  
 return String.*valueOf*(delisle);  
 }  
  
 private String newtonToCelcius(double newton) {  
 double celcius = newton/1e+12;  
 return String.*valueOf*(celcius);  
 }  
  
 private String newtonToFahrenheit(double newton) {  
 double fahrenheit = newton /1e+9;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String newtonToKelvin(double newton) {  
 double kelvin = newton/ 1e+6;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String newtonToRankine(double newton) {  
 double rankine = newton /1000;  
 return String.*valueOf*(rankine);  
 }  
  
 //Delisle  
 private String delisleToCelcius(double delisle) {  
 double celcius = delisle/1e+15;  
 return String.*valueOf*(celcius);  
 }  
  
 private String delisleToFahrenheit(double delisle) {  
 double fahrenheit = delisle/1e+12;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String delisleToKelvin(double delisle) {  
 double kelvin = delisle/1e+9;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String delisleToRankine(double delisle) {  
 double rankine = delisle/1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String delisleToNewton(double delisle) {  
 double newton = delisle/1000;  
 return String.*valueOf*(newton);  
 }  
  
}

**activity\_volume\_cal.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout 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:id="@+id/temp\_relativeLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/cardview\_dark\_background"  
 tools:context=".time\_cal">  
  
 <LinearLayout  
 android:id="@+id/ll\_heading"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="91dp"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:gravity="center"  
 android:text=" TIME"  
 android:textColor="@color/white"  
 android:textSize="55sp" />  
  
 <ImageView  
 android:layout\_width="90dp"  
 android:layout\_height="87dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="40dp"  
 android:src="@drawable/time" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/editTextLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_below="@id/ll\_heading"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="From"  
 android:inputType="phone"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="second"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="To"  
 android:enabled="false"  
 android:inputType="none"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="minute"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/listViewLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editTextLinearLayout"  
 android:layout\_marginTop="40dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/fromUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_fromUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_fromUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/toUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_selectToUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_toUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_toUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/listViewLinearLayout"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="120dp"  
 android:layout\_height="match\_parent"  
 android:background="@color/convertUnit"  
 android:padding="8dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/btn\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Convert"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
  
</RelativeLayout>

**volume\_cal.java**

package com.example.unitconverter;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.RelativeLayout;  
import android.widget.TextView;  
  
import java.util.Arrays;  
  
public class volume\_cal extends AppCompatActivity {  
 CardView cv\_fromUnit, cv\_toUnit, cv\_convert;  
 RelativeLayout mCLayout;  
 String fromUnit = "";  
 String toUnit = "";  
 TextView tv\_fromUnit, tv\_toUnit;  
 EditText et\_fromUnit, et\_toUnit;  
 final String[] values = new String[]{  
 "",  
 "liter",  
 "exaliter",  
 "petaliter",  
 "teraliter",  
 "gigaliter", "megaliter"  
 };  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_volume\_cal*);  
  
 cv\_fromUnit = findViewById(R.id.*fromUnit*);  
 cv\_toUnit = findViewById(R.id.*toUnit*);  
 cv\_convert = findViewById(R.id.*cv\_convert*);  
  
 mCLayout = findViewById(R.id.*temp\_relativeLayout*);  
  
 tv\_fromUnit = findViewById(R.id.*tv\_fromUnit*);  
 tv\_toUnit = findViewById(R.id.*tv\_toUnit*);  
  
 tv\_fromUnit.setText(values[0]);  
 tv\_toUnit.setText(values[0]);  
  
 et\_fromUnit = findViewById(R.id.*et\_fromUnit*);  
 et\_toUnit = findViewById(R.id.*et\_toUnit*);  
  
 cv\_convert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String tempInput = et\_fromUnit.getText().toString();  
 if (tempInput.equals("") || tempInput == null) {  
 et\_fromUnit.setError("Please enter some value");  
 } else {  
 if (tv\_fromUnit.getText().toString().equals(values[0])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(celciusToFarenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(celciusToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(celciusToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(celciusToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(celciusToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[1])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(fahrenheitToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(fahrenheitToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(fahrenheitToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(fahrenheitToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(fahrenheitToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[2])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(kelvinToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(kelvinToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(kelvinToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(kelvinToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(kelvinToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[3])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(rankineToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(rankineToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(rankineToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(rankineToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(rankineToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[4])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(newtonToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(newtonToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(newtonToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(newtonToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(newtonToDelisle(Double.*parseDouble*(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[5])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(delisleToCelcius(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(delisleToFahrenheit(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(delisleToKelvin(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(delisleToRankine(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(delisleToNewton(Double.*parseDouble*(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(tempInput);  
 }  
 }  
 }  
 }  
 });  
  
 cv\_toUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(volume\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "liter",  
 "exaliter",  
 "petaliter",  
 "teraliter",  
 "gigaliter", "megaliter"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.*asList*(flowers).get(i);  
 toUnit = selectedItem;  
 tv\_toUnit.setText(toUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 cv\_fromUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(volume\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "liter",  
 "exaliter",  
 "petaliter",  
 "teraliter",  
 "gigaliter", "megaliter"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.*asList*(flowers).get(i);  
 fromUnit = selectedItem;  
 tv\_fromUnit.setText(fromUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
 }  
  
 //celcius  
 private String celciusToKelvin(double celsius) {  
 double kelvin = celsius /1e+18;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String celciusToRankine(double celsius) {  
 double rankine = celsius /1e+15;  
 return String.*valueOf*(rankine);  
 }  
  
 private String celciusToNewton(double celsius) {  
 double newton = celsius /1e+12;  
 return String.*valueOf*(newton);  
 }  
  
 private String celciusToDelisle(double celsius) {  
 double delisle = celsius /1e+9;  
 return String.*valueOf*(delisle);  
 }  
  
 private String celciusToFarenheit(double celsius) {  
 double fahrenheit = celsius/ 1e+6;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 //fahrenheit  
 private String fahrenheitToKelvin(double fahrenheit) {  
 double kelvin = fahrenheit\*1000;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String fahrenheitToRankine(double fahrenheit) {  
 double rankine = fahrenheit\* 1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String fahrenheitToNewton(double fahrenheit) {  
 double newton = fahrenheit\*1e+9;  
 return String.*valueOf*(newton);  
 }  
  
 private String fahrenheitToDelisle(double fahrenheit) {  
 double delisle =fahrenheit\* 1e+12;  
 return String.*valueOf*(delisle);  
 }  
  
 private String fahrenheitToCelcius(double fahrenheit) {  
 double celcius = fahrenheit\*1e+18;  
 return String.*valueOf*(celcius);  
 }  
  
 //Kelvin  
 private String kelvinToRankine(double kelvin) {  
 double rankine = kelvin \* 1000;  
 return String.*valueOf*(rankine);  
 }  
  
 private String kelvinToNewton(double kelvin) {  
 double newton = kelvin\*1e+6;  
 return String.*valueOf*(newton);  
 }  
  
 private String kelvinToDelisle(double kelvin) {  
 double delisle = kelvin\*1e+9;  
 return String.*valueOf*(delisle);  
 }  
  
 private String kelvinToCelcius(double kelvin) {  
 double celcius = kelvin\*1e+15;  
 return String.*valueOf*(celcius);  
 }  
  
 private String kelvinToFahrenheit(double kelvin) {  
 double fahrenheit = kelvin/1000;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 //Rankine  
 private String rankineToNewton(double rankine) {  
 double newton = rankine\*1000;  
 return String.*valueOf*(newton);  
 }  
  
 private String rankineToDelisle(double rankine) {  
 double delisle = rankine\* 1e+6;  
 return String.*valueOf*(delisle);  
 }  
  
 private String rankineToCelcius(double rankine) {  
 double celcius = rankine\*1e+12;  
 return String.*valueOf*(celcius);  
 }  
  
 private String rankineToFahrenheit(double rankine) {  
 double fahrenheit = rankine/1e+6;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String rankineToKelvin(double rankine) {  
 double kelvin = rankine /1000;  
 return String.*valueOf*(kelvin);  
 }  
  
 //Newton  
 private String newtonToDelisle(double newton) {  
 double delisle = newton\*1000;  
 return String.*valueOf*(delisle);  
 }  
  
 private String newtonToCelcius(double newton) {  
 double celcius = newton \*1e+9;  
 return String.*valueOf*(celcius);  
 }  
  
 private String newtonToFahrenheit(double newton) {  
 double fahrenheit = newton /1e+9;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String newtonToKelvin(double newton) {  
 double kelvin = newton /1e+6;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String newtonToRankine(double newton) {  
 double rankine = newton /1000;  
 return String.*valueOf*(rankine);  
 }  
  
 //Delisle  
 private String delisleToCelcius(double delisle) {  
 double celcius = delisle\*1e+6;  
 return String.*valueOf*(celcius);  
 }  
  
 private String delisleToFahrenheit(double delisle) {  
 double fahrenheit = delisle/1e+12;  
 return String.*valueOf*(fahrenheit);  
 }  
  
 private String delisleToKelvin(double delisle) {  
 double kelvin = delisle/1e+9;  
 return String.*valueOf*(kelvin);  
 }  
  
 private String delisleToRankine(double delisle) {  
 double rankine = delisle/1e+6;  
 return String.*valueOf*(rankine);  
 }  
  
 private String delisleToNewton(double delisle) {  
 double newton = delisle/1000;  
 return String.*valueOf*(newton);  
 }  
  
}

**activity\_weight\_cal.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout 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:id="@+id/temp\_relativeLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/cardview\_dark\_background"  
 tools:context=".weight\_cal">  
  
 <LinearLayout  
 android:id="@+id/ll\_heading"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_text"  
 android:layout\_width="220dp"  
 android:layout\_height="91dp"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="40dp"  
 android:gravity="center"  
 android:text="WEIGHT"  
 android:textColor="@color/white"  
 android:textSize="52sp" />  
  
 <ImageView  
 android:layout\_width="86dp"  
 android:layout\_height="84dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="40dp"  
 android:src="@drawable/weight" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/editTextLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_below="@id/ll\_heading"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="From"  
 android:inputType="phone"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Gram"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:orientation="vertical">  
  
 <EditText  
 android:id="@+id/et\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="8dp"  
 android:background="@drawable/bg\_rounded\_input\_field"  
 android:hint="To"  
 android:enabled="false"  
 android:inputType="none"  
 android:padding="12dp"  
 android:textColor="@color/textColor"  
 android:textColorHint="@color/hintColor"  
 android:textCursorDrawable="@null" />  
  
 <TextView  
 android:id="@+id/tv\_toUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="kilogram"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="16sp" />  
  
 </LinearLayout>  
  
 </LinearLayout>  
  
 <LinearLayout  
 android:id="@+id/listViewLinearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editTextLinearLayout"  
 android:layout\_marginTop="40dp"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/fromUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_fromUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_fromUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_fromUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/toUnit"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="12dp"  
 android:layout\_weight="1"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/selectunit"  
 android:padding="4dp">  
  
 <RelativeLayout  
 android:id="@+id/rl\_selectToUnit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/tv2\_toUnit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Select Unit"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 <ImageView  
 android:layout\_width="20dp"  
 android:layout\_height="20dp"  
 android:layout\_centerVertical="true"  
 android:layout\_marginLeft="4dp"  
 android:layout\_toRightOf="@id/tv2\_toUnit"  
 android:src="@drawable/down\_arrow"  
 app:tint="@color/white" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
 </LinearLayout>  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cv\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/listViewLinearLayout"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:cardCornerRadius="10dp"  
 app:cardElevation="10dp">  
  
 <RelativeLayout  
 android:layout\_width="117dp"  
 android:layout\_height="match\_parent"  
 android:background="@color/convertUnit"  
 android:padding="8dp">  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerInParent="true"  
 android:padding="8dp">  
  
 <TextView  
 android:id="@+id/btn\_convert"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginRight="4dp"  
 android:text="Convert"  
 android:textColor="@color/white"  
 android:textSize="20sp" />  
  
 </RelativeLayout>  
  
 </RelativeLayout>  
  
 </androidx.cardview.widget.CardView>  
  
  
</RelativeLayout>

**weight\_cal.java**

package com.example.unitconverter;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.RelativeLayout;  
import android.widget.TextView;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import java.util.Arrays;  
  
public class weight\_cal extends AppCompatActivity {  
  
 CardView cv\_fromUnit, cv\_toUnit, cv\_convert;  
 RelativeLayout mCLayout;  
 String fromUnit = "";  
 String toUnit = "";  
 TextView tv\_fromUnit, tv\_toUnit;  
 EditText et\_fromUnit, et\_toUnit;  
 final String[] values = new String[]{  
 "",  
 "Kilogram",  
 "Gram",  
 "Exa Gram",  
 "Peta Gram",  
 "Tera Gram", "Giga Gram"  
 };  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_weight\_cal);  
  
 cv\_fromUnit = findViewById(R.id.fromUnit);  
 cv\_toUnit = findViewById(R.id.toUnit);  
 cv\_convert = findViewById(R.id.cv\_convert);  
  
 mCLayout = findViewById(R.id.temp\_relativeLayout);  
  
 tv\_fromUnit = findViewById(R.id.tv\_fromUnit);  
 tv\_toUnit = findViewById(R.id.tv\_toUnit);  
  
 tv\_fromUnit.setText(values[0]);  
 tv\_toUnit.setText(values[0]);  
  
 et\_fromUnit = findViewById(R.id.et\_fromUnit);  
 et\_toUnit = findViewById(R.id.et\_toUnit);  
  
 cv\_convert.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String tempInput = et\_fromUnit.getText().toString();  
 if (tempInput.equals("") || tempInput == null) {  
 et\_fromUnit.setError("Please enter some value");  
 } else {  
 if (tv\_fromUnit.getText().toString().equals(values[0])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(kilogramToGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(kilogramToExaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(kilogramToPetaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(kilogramToTeraGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(kilogramToGigaGram(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[1])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(gramToKiloGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(gramToExaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(gramToPetaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(gramToTeraGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(gramToGigaGram(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[2])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(exaGramToKiloGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(exaGramToGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(exaGramToPetaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(exaGramToTeraGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(exaGramToGigaGram(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[3])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(petaGramToKiloGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(petaGramToExaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(petaGramToExaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(petaGramToTeraGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(petaGramToGigaGram(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[4])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(teraGramToKiloGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(teraGramToGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(teraGramToExaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(teraGramToPetaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(tempInput);  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(teraGramToGigaGram(Double.parseDouble(tempInput)));  
 }  
 } else if (tv\_fromUnit.getText().toString().equals(values[5])) {  
 if (tv\_toUnit.getText().toString().equals(values[0])) {  
 et\_toUnit.setText(gigaGramToKiloGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[1])) {  
 et\_toUnit.setText(gigaGramToGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[2])) {  
 et\_toUnit.setText(gigaGramToExaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[3])) {  
 et\_toUnit.setText(gigaGramToPetaGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[4])) {  
 et\_toUnit.setText(gigaGramToTeraGram(Double.parseDouble(tempInput)));  
 } else if (tv\_toUnit.getText().toString().equals(values[5])) {  
 et\_toUnit.setText(tempInput);  
 }  
 }  
 }  
 }  
 });  
  
  
 cv\_toUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(weight\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Kilogram",  
 "Gram",  
 "Exa Gram",  
 "Peta Gram",  
 "Tera Gram", "Giga Gram"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.asList(flowers).get(i);  
 toUnit = selectedItem;  
 tv\_toUnit.setText(toUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
  
 cv\_fromUnit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 final AlertDialog.Builder builder = new AlertDialog.Builder(weight\_cal.this);  
 builder.setTitle("choose Unit");  
  
 final String[] flowers = new String[]{  
 "Kilogram",  
 "Gram",  
 "Exa Gram",  
 "Peta Gram",  
 "Tera Gram", "Giga Gram"  
 };  
  
 builder.setSingleChoiceItems(  
 flowers, // Items list  
 -1, // Index of checked item (-1 = no selection)  
 new DialogInterface.OnClickListener() // Item click listener  
 {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Get the alert dialog selected item's text  
 String selectedItem = Arrays.asList(flowers).get(i);  
 fromUnit = selectedItem;  
 tv\_fromUnit.setText(fromUnit);  
  
 }  
 });  
  
 builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 // Just dismiss the alert dialog after selection  
 // Or do something now  
 dialogInterface.dismiss();  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
  
 // Finally, display the alert dialog  
 dialog.show();  
  
 }  
 });  
 }  
  
 //Kilogram  
 private String kilogramToGram(double kilogram) {  
 double gram = kilogram \* 1000;  
 return String.valueOf(gram);  
 }  
  
 private String kilogramToExaGram(double kilogram) {  
 double exaGram = kilogram \* 1.0E-15;  
 return String.valueOf(exaGram);  
 }  
  
 private String kilogramToPetaGram(double kilogram) {  
 double petaGram = kilogram \* 1.0E-12;  
 return String.valueOf(petaGram);  
 }  
  
 private String kilogramToTeraGram(double kilogram) {  
 double teraGram = kilogram \* 1.0E-9;  
 return String.valueOf(teraGram);  
 }  
  
 private String kilogramToGigaGram(double kilogram) {  
 double gigaGram = kilogram / 1000000;  
 return String.valueOf(gigaGram);  
 }  
  
 //Gram  
 private String gramToExaGram(double gram) {  
 double exaGram = gram \* 1.0E-18;  
 return String.valueOf(exaGram);  
 }  
  
 private String gramToPetaGram(double gram) {  
 double petaGram = gram \* 1.0E-15;  
 return String.valueOf(petaGram);  
 }  
  
 private String gramToTeraGram(double gram) {  
 double teraGram = gram \* 1.0E-12;  
 return String.valueOf(teraGram);  
 }  
  
 private String gramToGigaGram(double gram) {  
 double gigaGram = gram \* 1.0E-9;  
 return String.valueOf(gigaGram);  
 }  
  
 private String gramToKiloGram(double gram) {  
 double kiloGram = gram \* 0.001;  
 return String.valueOf(kiloGram);  
 }  
  
 //Exa Gram  
 private String exaGramToPetaGram(double exaGram) {  
 double petaGram = exaGram \* 1000;  
 return String.valueOf(petaGram);  
 }  
  
 private String exaGramToTeraGram(double exaGram) {  
 double teraGram = exaGram \* 1000000;  
 return String.valueOf(teraGram);  
 }  
  
 private String exaGramToGigaGram(double exaGram) {  
 double gigaGram = exaGram \* 1e+9;  
 return String.valueOf(gigaGram);  
 }  
  
 private String exaGramToKiloGram(double exaGram) {  
 double kiloGram = exaGram \* 1.0E+15;  
 return String.valueOf(kiloGram);  
 }  
  
 private String exaGramToGram(double exaGram) {  
 double gram = exaGram \* 1.0E+18;  
 return String.valueOf(gram);  
 }  
  
 //Peta Gram  
 private String petaGramToTeraGram(double petaGram) {  
 double teraGram = petaGram \* 1000;  
 return String.valueOf(teraGram);  
 }  
  
 private String petaGramToGigaGram(double petaGram) {  
 double gigaGram = petaGram \* 1e+6;  
 return String.valueOf(gigaGram);  
 }  
  
 private String petaGramToKiloGram(double petaGram) {  
 double kiloGram = petaGram \* 1e+12;  
 return String.valueOf(kiloGram);  
 }  
  
 private String petaGramToGram(double petaGram) {  
 double Gram = petaGram \* 1e+15;  
 return String.valueOf(Gram);  
 }  
  
 private String petaGramToExaGram(double petaGram) {  
 double exaGram = petaGram / 1000;  
 return String.valueOf(exaGram);  
 }  
  
 //Tera Gram  
 private String teraGramToGigaGram(double teraGram) {  
 double gigaGram = teraGram \* 1000;  
 return String.valueOf(gigaGram);  
 }  
  
 private String teraGramToKiloGram(double teraGram) {  
 double kiloGram = teraGram \* 1e+9;  
 return String.valueOf(kiloGram);  
 }  
  
 private String teraGramToGram(double teraGram) {  
 double Gram = teraGram \* 1e+12;  
 return String.valueOf(Gram);  
 }  
  
 private String teraGramToExaGram(double teraGram) {  
 double exaGram = teraGram / 1e+6;  
 return String.valueOf(exaGram);  
 }  
  
 private String teraGramToPetaGram(double teraGram) {  
 double petaGram = teraGram / 1000;  
 return String.valueOf(petaGram);  
 }  
  
 //Giga Gram  
 private String gigaGramToKiloGram(double gigaGram) {  
 double kiloGram = gigaGram \* 1e+6;  
 return String.valueOf(kiloGram);  
 }  
  
 private String gigaGramToGram(double gigaGram) {  
 double Gram = gigaGram \* 1e+9;  
 return String.valueOf(Gram);  
 }  
  
 private String gigaGramToExaGram(double gigaGram) {  
 double exaGram = gigaGram / 1e+9;  
 return String.valueOf(exaGram);  
 }  
  
 private String gigaGramToPetaGram(double gigaGram) {  
 double petaGram = gigaGram / 1e+6;  
 return String.valueOf(petaGram);  
 }  
  
 private String gigaGramToTeraGram(double gigaGram) {  
 double teraGram = gigaGram / 1000;  
 return String.valueOf(teraGram);  
 }  
  
}