# UNIT CONVERTER ANDROID DEVELOPMENT

## XML FILES:-

## Main activity xml:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:background="#1A023C"

    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="UNIT CONVERTER"
        android:textSize="40dp"
        android:textColor="@color/white"
        android:background="#1A023C"
        android:textAlignment="center"
        android:gravity="center"/>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="300px"
        android:background="#1A023C"
        android:gravity="center"
        android:layout_margin="20dp"

        android:orientation="horizontal">
        <TextView
            android:layout_width="250dp"
            android:layout_height="100dp"
            android:background="#F47272"
            android:text="Area"
            android:textSize="40dp"
            android:textColor="@color/black"
            android:textAlignment="center"
            android:gravity="center"
            android:id="@+id/distance"
            />
        <ImageView
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:src="@drawable/area"
            />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
```

```xml
        android:layout_height="300px"
        android:background="#1A023C"
        android:layout_margin="20dp"

        android:gravity="center"
        android:orientation="horizontal">
    <TextView
        android:layout_width="250dp"
        android:layout_height="100dp"
        android:background="#F47272"
        android:text="Weight"
        android:textSize="40dp"
        android:textAlignment="center"
        android:gravity="center"
        android:id="@+id/weight"
        android:textColor="@color/black"
        />
    <ImageView
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:src="@drawable/weight"
        />
</LinearLayout>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="300px"
    android:background="#1A023C"
    android:gravity="center"
    android:layout_margin="20dp"

    android:orientation="horizontal">
    <TextView
        android:layout_width="250dp"
        android:layout_height="100dp"
        android:background="#F47272"
        android:text="Temperature"
        android:textSize="40dp"
        android:textColor="@color/black"
        android:textAlignment="center"
        android:gravity="center"
        android:id="@+id/temp"
        />
    <ImageView
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:src="@drawable/thermometer"
        />
</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="300px"
    android:background="#1A023C"
    android:gravity="center"
    android:layout_margin="20dp"

    android:orientation="horizontal">
```

```xml
        <TextView
            android:layout_width="250dp"
            android:layout_height="100dp"
            android:background="#F47272"
            android:text="Speed"
            android:textSize="40dp"
            android:textColor="@color/black"
            android:textAlignment="center"
            android:gravity="center"
            android:id="@+id/speed"
            />
        <ImageView
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:src="@drawable/speedometer"
            />
    </LinearLayout>


</LinearLayout>
```

## Activity_distance.xml:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:background="#1A023C"
    tools:context=".Distances">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="Area converter"
        android:textSize="40dp"
        android:textAlignment="center"
        android:gravity="center"
        android:textColor="@color/white"
        />
    <EditText
        android:layout_width="match_parent"
        android:layout_height="50dp"
        android:textColor="@color/white"

        android:hint="enter the value to convert"
        android:id="@+id/ed1"/>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="200dp"
        android:orientation="horizontal">
```

```xml
    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
    <TextView
        android:layout_width="200dp"
        android:layout_height="100dp"
        android:text="From select measure"
        android:textSize="20dp"
        android:gravity="center"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="20dp"
        android:textColor="@color/white"
        android:id="@+id/txt"
        />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"

            android:id="@+id/spinner"



            android:background="@android:drawable/btn_dropdown"

        />

    </LinearLayout>

<LinearLayout
    android:layout_width="200dp"
    android:layout_height="300dp"
    android:orientation="vertical">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="To select measure"
        android:textSize="20dp"
        android:gravity="center"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="20dp"
        android:textColor="@color/white"
        android:id="@+id/txt1"
        />

    <Spinner
        android:layout_width="200dp"
        android:layout_height="50dp"

        android:id="@+id/spinner1"


        android:background="@android:drawable/btn_dropdown"

    />
</LinearLayout>
```

```xml
        </LinearLayout>
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="0"
            android:gravity="center"
            android:layout_marginTop="10dp"
            android:textSize="30dp"
            android:textColor="@color/white"
            android:id="@+id/textans"
          />
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="answer"
            android:gravity="center"

            android:textSize="30dp"
            android:textColor="@color/white"
            android:id="@+id/ans1"
            android:background="#F47272"
            />
</LinearLayout>
```

## Activity_speed.xml:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:background="#1A023C"
    tools:context=".Speed">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="speed converter"
        android:textSize="30dp"
        android:textAlignment="center"
        android:gravity="center"
        android:textColor="@color/white"
        />
    <EditText
        android:layout_width="match_parent"
        android:layout_height="50dp"
        android:textColor="@color/white"

        android:hint="enter the value to convert"
        android:id="@+id/ed1"/>
```

```xml
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="200dp"
    android:orientation="horizontal">
    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="200dp"
            android:layout_height="100dp"
            android:text="From select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt"
            />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"

            android:id="@+id/spinner"



            android:background="@android:drawable/btn_dropdown"

            />

    </LinearLayout>

    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="To select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt1"
            />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"

            android:id="@+id/spinner1"
```

```
                    android:background="@android:drawable/btn_dropdown"

                    />
            </LinearLayout>
        </LinearLayout>
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="0"
            android:gravity="center"
            android:layout_marginTop="10dp"
            android:textSize="30dp"
            android:textColor="@color/white"
            android:id="@+id/textans"
            />
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="answer"
            android:gravity="center"

            android:textSize="30dp"
            android:textColor="@color/white"
            android:id="@+id/ans1"
            android:background="#F47272"
            />
</LinearLayout>
```

## Activity_temperature.xml:-

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:background="#1A023C"
    tools:context=".Temperature">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="Temperature converter"
        android:textSize="30dp"
        android:textAlignment="center"
        android:gravity="center"
        android:textColor="@color/white"
        />
    <EditText
        android:layout_width="match_parent"
        android:layout_height="50dp"
        android:textColor="@color/white"
```

```xml
        android:hint="enter the value to convert"
        android:id="@+id/ed1"/>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="200dp"
    android:orientation="horizontal">
    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="200dp"
            android:layout_height="100dp"
            android:text="From select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt"
            />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"

            android:id="@+id/spinner"



            android:background="@android:drawable/btn_dropdown"

            />

    </LinearLayout>

    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="To select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt1"
            />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"
```

```
                  android:id="@+id/spinner1"


                  android:background="@android:drawable/btn_dropdown"

                  />
        </LinearLayout>
    </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="0"
        android:gravity="center"
        android:layout_marginTop="10dp"
        android:textSize="30dp"
        android:textColor="@color/white"
        android:id="@+id/textans"
        />
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="answer"
        android:gravity="center"

        android:textSize="30dp"
        android:textColor="@color/white"
        android:id="@+id/ans1"
        android:background="#F47272"
        />
</LinearLayout>
```

## Activity_weights.xml:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:background="#1A023C"
    tools:context=".Weights">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="Weight converter"
        android:textSize="30dp"
        android:textAlignment="center"
        android:gravity="center"
        android:textColor="@color/white"
        />
```

```xml
<EditText
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:textColor="@color/white"

    android:hint="enter the value to convert"
    android:id="@+id/ed1"/>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="200dp"
    android:orientation="horizontal">
    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="200dp"
            android:layout_height="100dp"
            android:text="From select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt"
            />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"

            android:id="@+id/spinner"


            android:background="@android:drawable/btn_dropdown"

            />

    </LinearLayout>

    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
            android:text="To select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt1"
            />
```

```xml
            <Spinner
                android:layout_width="200dp"
                android:layout_height="50dp"

                android:id="@+id/spinner1"


                android:background="@android:drawable/btn_dropdown"


                />
        </LinearLayout>
    </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="0"
        android:gravity="center"
        android:layout_marginTop="10dp"
        android:textSize="30dp"
        android:textColor="@color/white"
        android:id="@+id/textans"
        />
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="answer"
        android:gravity="center"

        android:textSize="30dp"
        android:textColor="@color/white"
        android:id="@+id/ans1"
        android:background="#F47272"
        />
</LinearLayout>
```

JAVA FILES:-

Main_activity.java:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:background="#1A023C"
    tools:context=".Weights">
```

```xml
<TextView
    android:layout_width="match_parent"
    android:layout_height="100dp"
    android:text="Weight converter"
    android:textSize="30dp"
    android:textAlignment="center"
    android:gravity="center"
    android:textColor="@color/white"
    />
<EditText
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:textColor="@color/white"

    android:hint="enter the value to convert"
    android:id="@+id/ed1"/>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="200dp"
    android:orientation="horizontal">
    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="200dp"
            android:layout_height="100dp"
            android:text="From select measure"
            android:textSize="20dp"
            android:gravity="center"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="20dp"
            android:textColor="@color/white"
            android:id="@+id/txt"
            />

        <Spinner
            android:layout_width="200dp"
            android:layout_height="50dp"

            android:id="@+id/spinner"



            android:background="@android:drawable/btn_dropdown"

            />

    </LinearLayout>

    <LinearLayout
        android:layout_width="200dp"
        android:layout_height="300dp"
        android:orientation="vertical">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="100dp"
```

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```xml
                android:text="To select measure"
                android:textSize="20dp"
                android:gravity="center"
                android:layout_centerHorizontal="true"
                android:layout_marginTop="20dp"
                android:textColor="@color/white"
                android:id="@+id/txt1"
                />

            <Spinner
                android:layout_width="200dp"
                android:layout_height="50dp"

                android:id="@+id/spinner1"


                android:background="@android:drawable/btn_dropdown"

                />
        </LinearLayout>
    </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="0"
        android:gravity="center"
        android:layout_marginTop="10dp"
        android:textSize="30dp"
        android:textColor="@color/white"
        android:id="@+id/textans"
        />
    <TextView
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:text="answer"
        android:gravity="center"

        android:textSize="30dp"
        android:textColor="@color/white"
        android:id="@+id/ans1"
        android:background="#F47272"
        />
</LinearLayout>
```

Activity_distance.java:-

```java
package com.example.unitconverter;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
```

```java
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;
import android.widget.Toast;

public class Distances extends AppCompatActivity {
    Spinner spinner,spinner1;
    EditText ed1;
    TextView ans,anw1;
    String measures[]={"mm2","cm2","dm2","m2","dam2","hm2","km2"};
    int ed;
    String value,value1;
    double a;
    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_distances);
        anw1=findViewById(R.id.ans1);
        spinner=findViewById(R.id.spinner);
        spinner1=findViewById(R.id.spinner1);
        ed1=findViewById(R.id.ed1);

        ans=findViewById(R.id.textans);
        ArrayAdapter<String> adapter=new ArrayAdapter<>(Distances.this,
android.R.layout.simple_spinner_item,measures);

adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item
);
        spinner.setAdapter(adapter);
        spinner1.setAdapter(adapter);
      spinner.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {
          @Override
          public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                    value=adapterView.getItemAtPosition(i).toString();

          }

          @Override
          public void onNothingSelected(AdapterView<?> adapterView) {

          }
      });
      spinner1.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {


          @Override
          public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
              value1=adapterView.getItemAtPosition(i).toString();
```

```java
        }

        @Override
        public void onNothingSelected(AdapterView<?> adapterView) {

        }

    });
    anw1.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            try {
                ed = Integer.parseInt(ed1.getText().toString());
                if(value.equals("mm2"))
                {
                    if(value1.equals("mm2"))
                    {
                        ans.setText(ed+" ");
                    }
                    else if(value1.equals("cm2"))
                    {
                        a=ed*1.0/100;
                        ans.setText(a+" ");
                    }
                    else if(value1.equals("dm2"))
                    {
                        a=ed*1.0/10000;
                        ans.setText(a+" ");
                    }
                    else if(value1.equals("m2"))
                    {
                        a=ed*1.0/1000000;
                        ans.setText(a+" ");
                    }
                    else if(value1.equals("dam2"))
                    {
                        a=ed*1.0/100000000;
                        ans.setText(a+" ");
                    }
                    else if(value1.equals("hm2"))
                    {
                        ans.setText(ed+"*power(10,-10) ");
                    }
                    else if(value1.equals("km2"))
                    {
                        ans.setText(ed+"*power(10,-12)");
                    }
                }
                else if(value.equals("cm2"))
                {
                    if(value1.equals("mm2"))
                    {
                        ans.setText(ed*100+" ");
                    }
                    else if(value1.equals("cm2"))
                    {
                        ans.setText(ed+" ");
```

```java
                }
                else if(value1.equals("dm2"))
                {
                    a=ed*1.0/100;
                    ans.setText(a+" ");
                }
                else if(value1.equals("m2"))
                {
                    a=ed*1.0/10000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("dam2"))
                {
                    a=ed*1.0/1000000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("hm2"))
                {
                    a=ed*1.0/100000000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("km2"))
                {
                    ans.setText(ed+"*power(10,-10)");
                }
            }
            else if(value.equals("dm2"))
            {
                if(value1.equals("mm2"))
                {
                    ans.setText(ed*10000+" ");
                }
                else if(value1.equals("cm2"))
                {
                    a=ed*100;
                    ans.setText(a+" ");
                }
                else if(value1.equals("dm2"))
                {
                    a=ed;
                    ans.setText(a+" ");
                }
                else if(value1.equals("m2"))
                {
                    a=ed*1.0/100;
                    ans.setText(a+" ");
                }
                else if(value1.equals("dam2"))
                {
                    a=ed*1.0/10000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("hm2"))
                {
                    a=ed*1.0/1000000;
                    ans.setText(a+" ");
                }
```

```java
                else if(value1.equals("km2"))
                {
                    a=ed*1.0/100000000;
                    ans.setText(a+" ");
                }
            }
            else if(value.equals("m2"))
            {
                if(value1.equals("mm2"))
                {
                    ans.setText(ed*1000000+" ");
                }
                else if(value1.equals("cm2"))
                {
                    a=ed*10000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("dm2"))
                {
                    a=ed*100;
                    ans.setText(a+" ");
                }
                else if(value1.equals("m2"))
                {
                    a=ed;
                    ans.setText(a+" ");
                }
                else if(value1.equals("dam2"))
                {
                    a=ed*1.0/100;
                    ans.setText(a+" ");
                }
                else if(value1.equals("hm2"))
                {
                    a=ed*1.0/10000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("km2"))
                {
                    a=ed*1.0/1000000;
                    ans.setText(a+" ");
                }
            }
            else if(value.equals("dam2"))
            {
                if(value1.equals("mm2"))
                {

                    ans.setText(ed*100000000+" ");
                }
                else if(value1.equals("cm2"))
                {
                    a=ed*1000000;
                    ans.setText(a+" ");
                }
                else if(value1.equals("dm2"))
                {
```

```java
                a=ed*10000;
                ans.setText(a+" ");
            }
            else if(value1.equals("m2"))
            {
                a=ed*100;
                ans.setText(a+" ");
            }
            else if(value1.equals("dam2"))
            {
                a=ed;
                ans.setText(a+" ");
            }
            else if(value1.equals("hm2"))
            {
                a=ed*1.0/100;
                ans.setText(a+" ");
            }
            else if(value1.equals("km2"))
            {
                a=ed*1.0/10000;
                ans.setText(a+" ");
            }
        }
        else if(value.equals("hm2"))
        {
            if(value1.equals("mm2"))
            {

                ans.setText(ed+"*power(10,10) ");
            }
            else if(value1.equals("cm2"))
            {
                a=ed*100000000;
                ans.setText(a+" ");
            }
            else if(value1.equals("dm2"))
            {
                a=ed*1000000;
                ans.setText(a+" ");
            }
            else if(value1.equals("m2"))
            {
                a=ed*10000;
                ans.setText(a+" ");
            }
            else if(value1.equals("dam2"))
            {
                a=ed*100;
                ans.setText(a+" ");
            }
            else if(value1.equals("hm2"))
            {
                a=ed;
                ans.setText(a+" ");
            }
            else if(value1.equals("km2"))
```

```java
                        {
                            a=ed*1.0/100;
                            ans.setText(a+" ");
                        }
                    }
                    else if(value.equals("km2"))
                    {
                        if(value1.equals("mm2"))
                        {

                            ans.setText(ed+"*power(10,12) ");
                        }
                        else if(value1.equals("cm2"))
                        {
                            ans.setText(ed+"*power(10,10)");
                        }
                        else if(value1.equals("dm2"))
                        {
                            a=ed*100000000;
                            ans.setText(a+" ");
                        }
                        else if(value1.equals("m2"))
                        {
                            a=ed*1000000;
                            ans.setText(a+" ");
                        }
                        else if(value1.equals("dam2"))
                        {
                            a=ed*10000;
                            ans.setText(a+" ");
                        }
                        else if(value1.equals("hm2"))
                        {
                            a=ed*100;
                            ans.setText(a+" ");
                        }
                        else if(value1.equals("km2"))
                        {
                            a=ed;
                            ans.setText(a+" ");
                        }
                    }
                }
            catch (Exception e)
            {
                Toast.makeText(Distances.this, "enter only integer
values...", Toast.LENGTH_SHORT).show();
            }
        }
    });

    }
}
```

activity_speed.java:-

```java
package com.example.unitconverter;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;
import android.widget.Toast;

public class Speed extends AppCompatActivity {
    Spinner spinner,spinner1;
    EditText ed1;
    TextView ans,anw1;
    String measures[]={"km/hr","m/s"};
    int ed;
    String value,value1;

    double a;

    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_speed);
        anw1=findViewById(R.id.ans1);
        spinner=findViewById(R.id.spinner);
        spinner1=findViewById(R.id.spinner1);
        ed1=findViewById(R.id.ed1);

        ans=findViewById(R.id.textans);
        ArrayAdapter<String> adapter=new ArrayAdapter<>(Speed.this,
android.R.layout.simple_spinner_item,measures);

adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item
);
        spinner.setAdapter(adapter);
        spinner1.setAdapter(adapter);
        spinner.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                value=adapterView.getItemAtPosition(i).toString();

            }

            @Override
```

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```java
            public void onNothingSelected(AdapterView<?> adapterView) {


            }
        });
        spinner1.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {


            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                    value1=adapterView.getItemAtPosition(i).toString();


            }

            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {


            }

        });
        anw1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                try {
                    ed = Integer.parseInt(ed1.getText().toString());
                    if(value.equals("km/hr"))
                    {
                        if(value1.equals("km/hr"))
                        {
                            ans.setText(ed+" "+value1);
                        }
                        else if(value1.equals("m/s"))
                        {
                            ans.setText(ed/3.6+" "+value1);
                        }
                    }
                    else if(value.equals("m/s"))
                    {
                        if(value1.equals("km/hr"))
                        {
                            ans.setText(ed*3.6+" "+value1);
                        }
                        else if(value1.equals("m/s"))
                        {
                            ans.setText(ed+" "+value1);
                        }
                    }
                }
                catch (Exception e)
                {
                    Toast.makeText(Speed.this, "integer values are only
allowed", Toast.LENGTH_SHORT).show();
                }

            }
        });
```

```
        }
}
```

## activity_temperature.java:-

```java
package com.example.unitconverter;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;
import android.widget.Toast;

import java.text.DecimalFormat;
import java.math.*;

public class Temperature extends AppCompatActivity {
    Spinner spinner,spinner1;
    EditText ed1;
    TextView ans,anw1;
    String measures[]={"kelvin","celsius","fahrenheits"};
    int ed;
    String value,value1;

    double a;
    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_temperature);
        anw1=findViewById(R.id.ans1);
        spinner=findViewById(R.id.spinner);
        spinner1=findViewById(R.id.spinner1);
        ed1=findViewById(R.id.ed1);

        ans=findViewById(R.id.textans);
        ArrayAdapter<String> adapter=new ArrayAdapter<>(Temperature.this,
android.R.layout.simple_spinner_item,measures);

adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item
);
```

```java
        spinner.setAdapter(adapter);
        spinner1.setAdapter(adapter);
        spinner.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                value=adapterView.getItemAtPosition(i).toString();


            }

            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {


            }
        });
        spinner1.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {


            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                value1=adapterView.getItemAtPosition(i).toString();


            }

            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {


            }

        });
        anw1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                try {
                    ed=Integer.parseInt(ed1.getText().toString());
                    if (value.equals("kelvin")) {
                        if (value1.equals("fahrenheits")) {
                            a = ((ed * 1.0) - 273.15) * 1.8 + 32;
                            ans.setText(a + "°F");
                        } else if (value1.equals("celsius")) {
                            a = ed - 273.5;
                            ans.setText(a + "°C");
                        } else if (value1.equals("kelvin")) {
                            ans.setText(ed + "K");
                        }
                    } else if (value.equals("fahrenheits")) {
                        if (value1.equals("fahrenheits")) {

                            ans.setText(ed + "°F");
                        } else if (value1.equals("celsius")) {
                            a = (ed -32) / 1.8;
                            ans.setText(a + "°C");
                        } else if (value1.equals("kelvin")) {
                            a = ((ed - 32) / 1.8 )+ 273.5;
```

```java
                                ans.setText(a + "K");
                        }
                    } else if (value.equals("celsius")) {
                        if (value1.equals("fahrenheits")) {
                            a = (ed*1.8)+32;
                            ans.setText(a + "°F");
                        } else if (value1.equals("celsius")) {

                            ans.setText(ed + "°C");
                        } else if (value1.equals("kelvin")) {
                            a=ed+273.5;
                            ans.setText(a + "K");
                        }
                    }
                }
                catch(Exception e)
                {
                    Toast.makeText(Temperature.this, "enter only integer
values", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}
```

## activity_weights.java:-

```java
package com.example.unitconverter;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;
import android.widget.Toast;

public class Weights extends AppCompatActivity {
    Spinner spinner,spinner1;
    EditText ed1;
    TextView ans,anw1;
    String measures[]={"pg","ng","µg","mg","g","kg","t","Mt","Gt"};
    int ed;
    String value,value1;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_weights);
        anw1=findViewById(R.id.ans1);
        spinner=findViewById(R.id.spinner);
        spinner1=findViewById(R.id.spinner1);
        ed1=findViewById(R.id.ed1);

        ans=findViewById(R.id.textans);
        ArrayAdapter<String> adapter=new ArrayAdapter<>(Weights.this,
android.R.layout.simple_spinner_item,measures);

adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item
);
        spinner.setAdapter(adapter);
        spinner1.setAdapter(adapter);
        spinner.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                value=adapterView.getItemAtPosition(i).toString();

            }

            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {

            }
        });
        spinner1.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {


            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view,
int i, long l) {
                value1=adapterView.getItemAtPosition(i).toString();

            }

            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {

            }

        });

      anw1.setOnClickListener(new View.OnClickListener() {
          @Override
          public void onClick(View view) {
              try {
                  ed=Integer.parseInt(ed1.getText().toString());
                  if(value.equals("pg"))
                  {
                      if(value1.equals("pg"))
                      {
                          ans.setText(ed+" "+value1);
```

```java
                            }
                            else if(value1.equals("ng"))
                            {
                                ans.setText(ed/1000+" "+value1);
                            }
                            else if(value1.equals("µg"))
                            {
                                ans.setText(ed/1000000+" "+value1);
                            }
                            else if(value1.equals("mg"))
                            {
                                ans.setText(ed/1000000000+" "+value1);
                            }
                            else if(value1.equals("g"))
                            {
                                ans.setText(0.000000000001*ed+" "+value1);
                            }
                            else if(value1.equals("kg"))
                            {
                                ans.setText(0.000000000000001*ed+" "+value1);
                            }
                            else if(value1.equals("t"))
                            {
                                ans.setText(0.000000000000000001*ed+" "+value1);
                            }
                            else if(value1.equals("Mt"))
                            {
                                ans.setText(0.0000000000000000000001*ed+"
"+value1);
                            }
                            else if(value1.equals("Gt"))
                            {
                                ans.setText(0.0000000000000000000000001*ed+"
"+value1);
                            }
                        }
                        else if(value.equals("ng"))
                        {
                            if(value1.equals("pg"))
                            {
                                ans.setText(ed*1000+" "+value1);
                            }
                            else if(value1.equals("ng"))
                            {
                                ans.setText(ed+" "+value1);
                            }
                            else if(value1.equals("µg"))
                            {
                                ans.setText(ed/1000+" "+value1);
                            }
                            else if(value1.equals("mg"))
                            {
                                ans.setText(ed/1000000+" "+value1);
                            }
                            else if(value1.equals("g"))
                            {
                                ans.setText(0.000000001*ed+" "+value1);
```

```java
                        }
                        else if(value1.equals("kg"))
                        {
                            ans.setText(0.000000000001*ed+" "+value1);
                        }
                        else if(value1.equals("t"))
                        {
                            ans.setText(0.000000000000001*ed+" "+value1);
                        }
                        else if(value1.equals("Mt"))
                        {
                            ans.setText(0.00000000000000001*ed+" "+value1);
                        }
                        else if(value1.equals("Gt"))
                        {
                            ans.setText(0.00000000000000000001*ed+"
"+value1);
                        }
                    }
                    else if(value.equals("µg"))
                    {
                        if(value1.equals("pg"))
                        {
                            ans.setText(ed*1000000+" "+value1);
                        }
                        else if(value1.equals("ng"))
                        {
                            ans.setText(ed*1000+" "+value1);
                        }
                        else if(value1.equals("µg"))
                        {
                            ans.setText(ed+" "+value1);
                        }
                        else if(value1.equals("mg"))
                        {
                            ans.setText(ed/1000+" "+value1);
                        }
                        else if(value1.equals("g"))
                        {
                            ans.setText(0.000001*ed+" "+value1);
                        }
                        else if(value1.equals("kg"))
                        {
                            ans.setText(0.000000001*ed+" "+value1);
                        }
                        else if(value1.equals("t"))
                        {
                            ans.setText(0.000000000001*ed+" "+value1);
                        }
                        else if(value1.equals("Mt"))
                        {
                            ans.setText(0.000000000000001*ed+" "+value1);
                        }
                        else if(value1.equals("Gt"))
                        {
                            ans.setText(0.000000000000000001*ed+" "+value1);
                        }
```

```java
                }
                else if(value.equals("mg"))
                {
                    if(value1.equals("pg"))
                    {
                        ans.setText(ed*1000000000+" "+value1);
                    }
                    else if(value1.equals("ng"))
                    {
                        ans.setText(ed*1000000+" "+value1);
                    }
                    else if(value1.equals("µg"))
                    {
                        ans.setText(ed*1000+" "+value1);
                    }
                    else if(value1.equals("mg"))
                    {
                        ans.setText(ed+" "+value1);
                    }
                    else if(value1.equals("g"))
                    {
                        ans.setText(0.001*ed+" "+value1);
                    }
                    else if(value1.equals("kg"))
                    {
                        ans.setText(0.000001*ed+" "+value1);
                    }
                    else if(value1.equals("t"))
                    {
                        ans.setText(0.000000001*ed+" "+value1);
                    }
                    else if(value1.equals("Mt"))
                    {
                        ans.setText(0.000000000001*ed+" "+value1);
                    }
                    else if(value1.equals("Gt"))
                    {
                        ans.setText(0.000000000000001*ed+" "+value1);
                    }
                }
                else if(value.equals("g"))
                {
                    if(value1.equals("pg"))
                    {
                        ans.setText(ed+"*power(10,12)"+value1);
                    }
                    else if(value1.equals("ng"))
                    {
                        ans.setText(ed*1000000000+" "+value1);
                    }
                    else if(value1.equals("µg"))
                    {
                        ans.setText(ed*1000000+" "+value1);
                    }
                    else if(value1.equals("mg"))
                    {
                        ans.setText(ed*1000+" "+value1);
```

```java
            }
            else if(value1.equals("g"))
            {
                ans.setText(ed+" "+value1);
            }
            else if(value1.equals("kg"))
            {
                ans.setText(0.001*ed+" "+value1);
            }
            else if(value1.equals("t"))
            {
                ans.setText(0.000001*ed+" "+value1);
            }
            else if(value1.equals("Mt"))
            {
                ans.setText(0.000000001*ed+" "+value1);
            }
            else if(value1.equals("Gt"))
            {
                ans.setText(0.000000000001*ed+" "+value1);
            }
        }
        else if(value.equals("kg"))
        {
            if(value1.equals("pg"))
            {
                ans.setText(ed+"*power(10,15)"+value1);
            }
            else if(value1.equals("ng"))
            {
                ans.setText(ed+"*power(10,12)"+value1);
            }
            else if(value1.equals("µg"))
            {
                ans.setText(ed*1000000000+" "+value1);
            }
            else if(value1.equals("mg"))
            {
                ans.setText(ed*1000000+" "+value1);
            }
            else if(value1.equals("g"))
            {
                ans.setText(ed*1000+" "+value1);
            }
            else if(value1.equals("kg"))
            {
                ans.setText(ed+" "+value1);
            }
            else if(value1.equals("t"))
            {
                ans.setText(0.001*ed+" "+value1);
            }
            else if(value1.equals("Mt"))
            {
                ans.setText(0.000001*ed+" "+value1);
            }
            else if(value1.equals("Gt"))
```

```java
                {
                    ans.setText(0.000000001*ed+" "+value1);
                }
            }
            else if(value.equals("t"))
            {
                if(value1.equals("pg"))
                {
                    ans.setText(ed+"*power(10,18)"+value1);
                }
                else if(value1.equals("ng"))
                {
                    ans.setText(ed+"*power(10,15)"+value1);
                }
                else if(value1.equals("µg"))
                {
                    ans.setText(ed+"*power(10,12) "+value1);
                }
                else if(value1.equals("mg"))
                {
                    ans.setText(ed*1000000000+" "+value1);
                }
                else if(value1.equals("g"))
                {
                    ans.setText(ed*1000000+" "+value1);
                }
                else if(value1.equals("kg"))
                {
                    ans.setText(ed*1000+" "+value1);
                }
                else if(value1.equals("t"))
                {
                    ans.setText(ed+" "+value1);
                }
                else if(value1.equals("Mt"))
                {
                    ans.setText(0.001*ed+" "+value1);
                }
                else if(value1.equals("Gt"))
                {
                    ans.setText(0.000001*ed+" "+value1);
                }
            }
            else if(value.equals("Mt"))
            {
                if(value1.equals("pg"))
                {
                    ans.setText(ed+"*power(10,21)"+value1);
                }
                else if(value1.equals("ng"))
                {
                    ans.setText(ed+"*power(10,18)"+value1);
                }
                else if(value1.equals("µg"))
                {
                    ans.setText(ed+"*power(10,15) "+value1);
                }
```

```java
        else if(value1.equals("mg"))
        {
            ans.setText(ed+"*power(10,12) "+value1);
        }
        else if(value1.equals("g"))
        {
            ans.setText(ed*1000000000+" "+value1);
        }
        else if(value1.equals("kg"))
        {
            ans.setText(ed*1000000+" "+value1);
        }
        else if(value1.equals("t"))
        {
            ans.setText(ed*1000+" "+value1);
        }
        else if(value1.equals("Mt"))
        {
            ans.setText(ed+" "+value1);
        }
        else if(value1.equals("Gt"))
        {
            ans.setText(0.001*ed+" "+value1);
        }
    }
    else if(value.equals("Gt"))
    {
        if(value1.equals("pg"))
        {
            ans.setText(ed+"*power(10,24)"+value1);
        }
        else if(value1.equals("ng"))
        {
            ans.setText(ed+"*power(10,21)"+value1);
        }
        else if(value1.equals("µg"))
        {
            ans.setText(ed+"*power(10,18) "+value1);
        }
        else if(value1.equals("mg"))
        {
            ans.setText(ed+"*power(10,15) "+value1);
        }
        else if(value1.equals("g"))
        {
            ans.setText(ed+"*power(10,12) "+value1);
        }
        else if(value1.equals("kg"))
        {
            ans.setText(ed*1000000000+" "+value1);
        }
        else if(value1.equals("t"))
        {
            ans.setText(ed*1000000+" "+value1);
        }
        else if(value1.equals("Mt"))
        {
```

```
                            ans.setText(ed*1000+" "+value1);
                    }
                    else if(value1.equals("Gt"))
                    {
                            ans.setText(ed+" "+value1);
                    }
                }
            }
            catch(Exception e)
            {
                Toast.makeText(Weights.this, "enter integer value only",
Toast.LENGTH_SHORT).show();
            }
        }
    });
    }
}
```