PRACTICAL-4

AIM: Create a temperature converter Application. (Fahrenheit-Celsius)

Activity_temp__main.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:layout_width="match_parent"
   android:layout_height="match_parent"
   tools:context="com.example.administrator.temp_controller.temp_MainActivity"
   tools:layout_editor_absoluteY="81dp">

   <RadioGroup
      android:id="@+id/radioGroup1"
      android:layout_width="match_parent"
      android:layout_height="wrap_content" >

   <RadioButton
      android:id="@+id/cel"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginLeft="33dp"
      android:layout_marginTop="46dp"
      android:text="cel" />

   <RadioButton
      android:id="@+id/fah"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_below="@+id/cel"
      android:layout_marginLeft="33dp"
      android:text="fah" />
   </RadioGroup>

   <EditText
      android:id="@+id/text"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_below="@+id/fah"
      android:layout_marginBottom="49dp"
      android:layout_marginStart="48dp"
      android:ems="10"
```

```
        android:hint="enter value"
        android:inputType="number" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="278dp"
        android:layout_marginStart="124dp"
        android:layout_below="@+id/text"
        android:text="convert" />
</RelativeLayout>
```

Calculator.java

```
package com.example.administrator.temp_controller;

        import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.view.View;
        import android.widget.Button;
        import android.widget.EditText;
import android.widget.RadioButton;

public class temp_MainActivity extends AppCompatActivity
{
   EditText text;
   Button btnl;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_temp__main);
        text = (EditText) findViewById(R.id.text);
        btnl = findViewById(R.id.button);
        btnl.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                RadioButton cel=(RadioButton) findViewById(R.id.cel);
                RadioButton fah=(RadioButton) findViewById(R.id.fah);

                float input=Float.parseFloat(text.getText().toString());
```

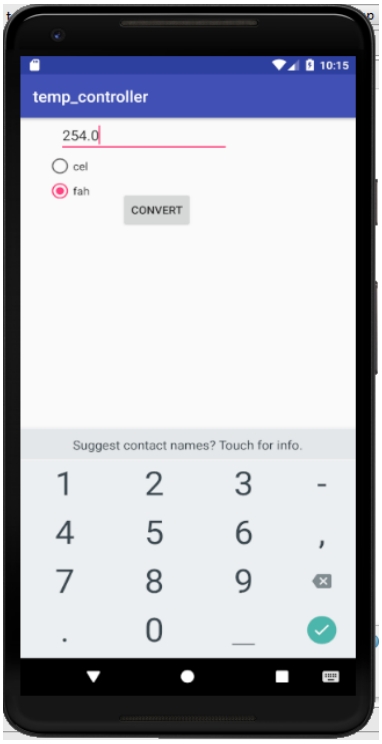
```
            if(cel.isChecked())
            {
               text.setText(String.valueOf(f_2_c(input)));
               cel.setChecked(false);
               fah.setChecked(false);
            }
            else
            {
               text.setText(String.valueOf(c_2_f(input)));
               cel.setChecked(false);
               fah.setChecked(false);
            }
         }
      });
   }

 public float f_2_c(float f)
 {
    return((f-32)*5/9);
 }

   public float c_2_f(float c)
   {
      return((c*9)/5+32);
   }

}
```

OUTPUT:



Conclusion:

We successfully completed creating temperature converter Application. (Fahrenheit-Celsius)