TEMPERATURE CONVERTER

Mobile App Development. CSE4002.

SLOT: L3+L4.

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MainActivity.java:

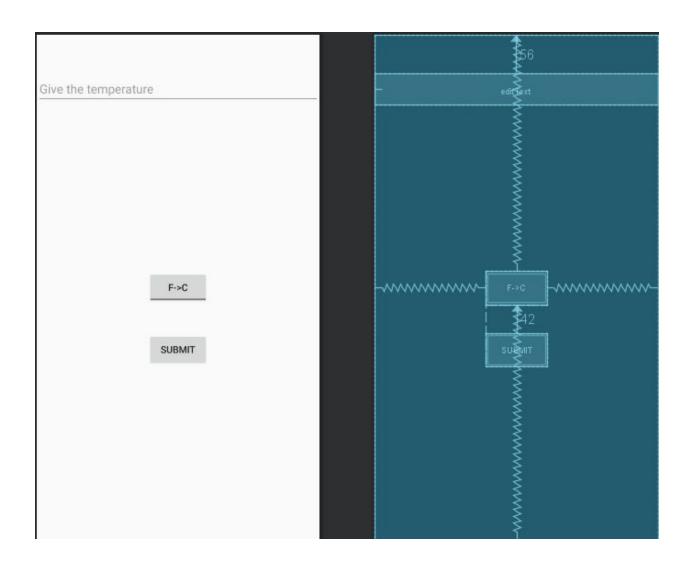
package com.example.temperatureconverter; import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText; import android.widget.Toast; import android.widget.ToggleButton; public class MainActivity extends AppCompatActivity { Button b1: EditText et; ToggleButton tb; Double a; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);

```
et=(EditText) findViewById(R.id.editText);
       b1=(Button) findViewById(R.id.button);
       tb=(ToggleButton) findViewById(R.id.toggleButton);
       b1.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
              if(et.getText().toString().isEmpty())
              Toast.makeText(MainActivity.this,"Please enter the
temperature", Toast. LENGTH_SHORT). show();
              }
              else if(tb.isChecked())
              {
              a=Double.parseDouble(String.valueOf(et.getText()));
              Double b=a*9/5+32;
              String r=String.valueOf(b);
              Toast.makeText(MainActivity.this,r+"°F",Toast.LENGTH_SHORT).show();
              }
              else
              a=Double.parseDouble(String.valueOf(et.getText()));
              Double b=a-32;
              Double c=b*5/9;
              String r=String.valueOf(c);
              Toast.makeText(MainActivity.this,r+"°C",Toast.LENGTH_SHORT).show();
              }
       }
       });
}
acitivity_main.xml:
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
       xmlns:tools="http://schemas.android.com/tools"
       android:id="@+id/activity main"
       android:layout width="match parent"
```

```
android:layout_height="match_parent"
       >
       <ToggleButton
       android:text="Convert"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout centerVertical="true"
       android:layout centerHorizontal="true"
       android:id="@+id/toggleButton"
       android:textOn="C->F"
       android:textOff="F->C"/>
       <EditText
       android:layout_width="match_parent"
       android:layout_height="wrap_content"
       android:inputType="numberDecimal|numberSigned"
       android:hint="Give the temperature"
       android:ems="10"
       android:layout alignParentTop="true"
       android:layout_centerHorizontal="true"
       android:layout_marginTop="56dp"
       android:id="@+id/editText" />
       <Button
       android:text="Submit"
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:layout_below="@+id/toggleButton"
       android:layout alignStart="@+id/toggleButton"
       android:layout marginTop="42dp"
       android:id="@+id/button" />
</RelativeLayout>
```

App Design and Blueprint:



OUTPUT:

