Prof : Dr Sundar,

Subject : 23MX27(Mobile Application Development

Student : Lt Col T V Perumal(Retd)

Exercise 1, Qsn2

import android.os.Bundle

import android.view.View

import android.widget.Button

import android.widget.TextView

import android.widget.Toast

import androidx.appcompat.app.AppCompatActivity

import kotlin.math.round

class MainActivity : AppCompatActivity() {

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.activity\_main)

val txtV4 = findViewById<TextView>(R.id.txtV4)

txtV4.visibility = View.GONE

val btn = findViewById<Button>(R.id.btn1)

btn.setOnClickListener({ onBtnClk(btn) })

}

fun onBtnClk(btn: Button) {

//btn.text = "Done Calculations"

val edTxt1 = findViewById<TextView>(R.id.edTxt1)

val edTxt2 = findViewById<TextView>(R.id.edTxt2)

var ip1Str: String = edTxt1.getText().toString().trim()

var ip2Str: String = edTxt2.getText().toString().trim()

val txtV4 = findViewById<TextView>(R.id.txtV4)

txtV4.visibility = View.GONE

if (!ip1Str.isEmpty()) {

// Input not blank, parse it as an double

try {

val f: Double = ip1Str.toDouble()

FahrToCel(f, edTxt2, btn)

} catch (e: NumberFormatException) {

}

} else {

// Handle the case where the input is blank

}

if (!ip2Str.isEmpty()) {

// Input not blank, parse it as an double

try {

val c: Double = ip2Str.toDouble()

CelToFahr(c, edTxt1, btn)

} catch (e: NumberFormatException) {

// Handle the case the input is blank

}

} else if ( ip1Str.isEmpty() && ip2Str.isEmpty() ){

var msg = "Please enter some suitable values to convert"

fun1(msg)

// btn.setOnClickListener({ onBtnClk(btn) })// Handle the case where the input is blank

}

}

fun FahrToCel(f: Double, txtV: TextView, btn: Button) {

var c = (f - 32) \* 5 / 9

var cRd = String.format("%.2f", c)

txtV.text = cRd

btn.text = "Done : Fahrenheit to Celsius"

var msg = "$f fahrenheit is $cRd celsius"

fun1(msg)

}

fun CelToFahr(c: Double, txtV: TextView, btn: Button) {

var f = (c \* 9 / 5) + 32

var fRd = String.format("%.2f", f)

txtV.text = fRd

btn.text = "Done : Celsius to Fahrenheit"

var msg = "$c celsius is $fRd fahrenheit"

fun1(msg)

}

fun fun1(str: String) {

val txtV4 = findViewById<TextView>(R.id.txtV4)

txtV4.visibility = View.VISIBLE

txtV4.text = str

Toast.makeText(applicationContext, str, Toast.LENGTH\_SHORT).show()

}

}

<?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"

tools:context=".MainActivity">

<TextView

android:id="@+id/txtV1"

android:layout\_width="232dp"

android:layout\_height="46dp"

android:text="My Temperature converter"

android:textAlignment="textStart"

android:textSize="16sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<Space

android:layout\_width="match\_parent"

android:layout\_height="15dp" />

<TextView

android:id="@+id/txtV2"

android:layout\_width="239dp"

android:layout\_height="47dp"

android:text="Enter Fahrenheit Temp below"

android:textSize="16sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<Space

android:layout\_width="match\_parent"

android:layout\_height="15dp" />

<EditText

android:id="@+id/edTxt1"

android:layout\_width="230dp"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="numberDecimal" />

<Space

android:layout\_width="match\_parent"

android:layout\_height="15dp" />

<TextView

android:id="@+id/txtV3"

android:layout\_width="239dp"

android:layout\_height="47dp"

android:text="Enter Celsius Temp below"

android:textSize="16sp" />

<EditText

android:id="@+id/edTxt2"

android:layout\_width="230dp"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="numberDecimal" />

<Space

android:layout\_width="match\_parent"

android:layout\_height="30dp" />

<Button

android:id="@+id/btn1"

android:layout\_width="220dp"

android:layout\_height="77dp"

android:text="Convert temperature" />

<Space

android:layout\_width="match\_parent"

android:layout\_height="25dp" />

<TextView

android:id="@+id/txtV4"

android:layout\_width="232dp"

android:layout\_height="47dp"

android:text="TextView" />

</LinearLayout>