SRI LANKA TECHNOLOGICAL CAMPUS

CCS200 – Object Oriented Programming

Assignment 01   **Assignment Due: 22nd April 2021 12.00 Noon**

You are required to develop a Java application to measure the temperature of a person within a day. Readings are collected after each 2 hours and after a day. You are required to collect 12 readings. *Figure 1* shows the clinical thermometer you have to use and it ranges from 35 – 42 C^0. After collecting the all readings, calculate average, minimum and maximum temperature for a day in Fahrenheit.

Figure 1: Clinical thermometer

A. Read Celsius temperature (°C) from keyboard and convert to Fahrenheit temperature (°F) To do the temperature conversion uses the following equation.

$$°F = \frac{9}{5}°C + 32$$

B. Read Celsius temperature 12 times (0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 Hours) and calculate the average, minimum and maximum temperatures.

C. Validate your input data range from 35 to 42 °C (Human body temperature range)

D. Print the summary sheet as given below

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Temperature Summary for a day

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Average Temperature: 100.58F
Maximum Temperature: 102.4F
Minimum Temperature: 99.3F
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