Homework 1

Before attempting this project, be sure you have completed all of the reading assignments, hands-on labs, discussions, and assignments to date.

Write a Java program that prompts a user to enter student EMPLID (e.g., 12389), quiz 1 percentage score (e.g., 89.5), quiz 2 percentage score (e.g., 81.2), quiz 3 percentage score (e.g., 92.5), your age **in months** (e.g. 384) and the current temperature in degrees Celsius and then displays the data entered along with some conversions and calculations.

A minimum of 3 test cases should be supplied in the form of table with columns indicating the input values, expected output, actual output and if the test case passed or failed. This table should contain 4 columns with appropriate labels and a row for each test case. An example template is shown below. Note that the actual output should be the actual results you receive when running your program and applying the input for the test record.

The google recommended Java style guide, provided as link in the week 2 content, should be used to format and document your code. Specifically, the following style guide attributes should be addressed:

- Header comments include filename, author, date and brief purpose of the program.
- In-line comments used to describe major functionality of the code.
- Meaningful variable names and prompts applied.
- Class names are written in UpperCamelCase.
- Variable names are written in lowerCamelCase.
- Constant names are in written in All Capitals.
- Braces use K&R style**.**

You should capture and label screen captures associated with compiling your code, and running each of your 3 test cases.

You should use the command prompt and not a GUI for data entry and display. Here is a sample run:

> Enter your Student EMPLID (0 - 999999): 43023
> Enter your quiz1 percentage score (0.0 – 100.0): 80.6
> Enter your quiz2 percentage score (0.0 – 100.0): 82.6
> Enter your quiz2 percentage score (0.0 – 100.0): 92.1
> Enter your age in months (0-1440): 384
> Enter the current Temperature in degrees Celsius: 19.0
>
> *** Thank you ***
> Student EMPLID: 43023
> Quiz 1 Score: 80.6
> Quiz 2 Score: 82.6
> Quiz 3 Score: 92.1
> Average quiz score: 80.0
> Age in months: 384
> Age in years: 32

Temperature in Celsius: 19.0°
Temperature in Fahrenheit: 66.2°

Note the following for the output for this application:

1. Degrees Celsius has been converted to degrees Fahrenheit on the output.
2. The temperature output provides the degrees symbol (°). (Hint: Use Unicode characters)
3. The average quiz score is calculated from the three quiz scores input.

Example test cases:

Input	Expected Output	Actual Output	Pass?
EMPLID: 32012 Quiz1: 30.0 Quiz2: 20.5 Quiz3: 60.2 Age in months: 120 Temperature in Celsius: 0.0°	*** Thank you *** Student EMPLID: 32012 Quiz 1 Score: 30.0 Quiz 2 Score: 20.5 Quiz 3 Score: 60.2 Average quiz score: 36.9 Age in months: 120 Age in years: 10 Temperature in Celsius: 0.0° Temperature in Fahrenheit: 32.0°	*** Thank you *** Student EMPLID: 32012 Quiz 1 Score: 30.0 Quiz 2 Score: 20.5 Quiz 3 Score: 60.2 Average quiz score: Age in months: 120 Age in years: 10 Temperature in Celsius: 0.0° Temperature in Fahrenheit: 32.0° 376	**Yes**
Test case 2 here			
Test case 3 here			

Submission requirements
Deliverables include all Java files (.java) and a single word (or PDF) document. The Java files should be named appropriately for your applications. The word (or PDF) document should include screen captures showing the successful compiling and running of each of the test cases. Each screen capture should be properly labeled clearly indicated what the screen capture represents. The test cases table should be included in your word or PDF document and properly labeled as well.

Submit your files to the Homework 1 assignment area no later than the due date listed in your LEO classroom. You should include your name and HW1 in your word (or PDF) file submitted (e.g. firstnamelastnamehw1.docx or firstnamelastnamehw1.pdf)

Grading Rubric:

The following grading rubric will be used to determine your grade:

Attribute	Meets	Does not meet
User input	5 points Application prompts a user to enter student EMPLID, quiz 1 percentage score, quiz 2 percentage score, quiz 3 percentage score, age **in months** and the current temperature in degrees Celsius. Command Line was used for input.	0 points Application does not prompt a user to enter student EMPLID, quiz 1 percentage score, quiz 2 percentage score, quiz 3 percentage score, age **in months** and the current temperature in degrees Celsius. Command Line was not used for input.
Application output	10 points Application correctly displays all data entered by the user along with the calculated output for average quiz, age in years and temperature in Fahrenheit. Command Line was used for output.	0 points Application does not correctly displays all data entered by the user along with the calculated output for average quiz, age in years and temperature in Fahrenheit. Command Line was not used for output.
Test Cases	5 points A minimum of 3 test cases was used in the form of table with columns indicating the input values, expected output, actual output and if the test case passed or failed. The table should contains 4 columns with appropriate labels and a row for each test case. Test cases were included in the supporting word or PDF documentation.	0 points No test cases were provided.
Documentation and Style guide	5 points Screen captures were provided and labeled for compiling your	0 points No documentation included

| | code, and running each of your 3 test cases.

Header comments include filename, author, date and brief purpose of the program.

In-line comments used to describe major functionality of the code.

Meaningful variable names and prompts applied.

Class names are written in UpperCamelCase.

Variable names are written in lowerCamelCase.

Constant names are in written in All Capitals.

Braces use K&R style. | Java style guide was not used to prepare the Java code. |