

Due:

Sunday, 1-November-2020 by 23:59

Deliverables:

The following Java files should be submitted to MS Teams by the due date and time specified above. Submissions received after the deadline will be subject to the late policy described in the syllabus.

- MyLifeGoals_{StudentNumber}.java
- CourseGrade_{StudentNumber}.java

Specifications:

Overview: You will write two programs for this assignment. One will display your short-term, medium-term, and long-term goals to the standard output. The other will determine the grade for a student in a course. Do not forget your program headers with Author and Date information.

- **My Life Goals**

Requirements: Write a program that prints your name, your short-term, medium-term, and long-term goals.

Design: Your program should consist of Java instructions to display the following information:

```
C:\JavaFileLocation>java MyLifeGoals_123456789
Joseph Ledet

Describe your short-term life goals. (at least 100 characters in one line)
Describe your medium-term life goals. (at least 100 characters in one line)
Describe your long-term life goals. (at least 100 characters in one line)
```

Describe your life goals (if you have never thought about them, this is a good chance to think about them carefully). The actual output for each line must be at least 100 characters. But remember that the lines of code can NOT exceed 80 characters.

Code and Test: The expected output for the program will vary from student to student, but it is important to follow the output pattern described above, formatting requirements, and minimum character requirements. If you aren't sure how many characters are in your output, you can copy your output into Microsoft Word or a Google doc and use the Word Count feature under the Review ribbon.

- **CourseGrade**

Requirements: Write a program that gets information about a grading for a course in a school or university, then gets the information about a student. It will then display the final grade for the student. The following guidelines should be followed:

- Grading percentage
 - Value must be a whole number 0 or greater
 - If the teacher tries to enter a negative number, the system should set it to the positive value
 - Total must sum to 100
 - If the teacher enters values that do not sum to 100, the system should display an error message and exit
- Student points
 - Value will be a decimal number greater than or equal to 0 and less than or equal to 100 representing percentage of that category achieved.
 - For this assignment, you will not be required to confirm the value entered is valid
 - Once all values are entered, the system should calculate the total score and grade letter and if the student passed according to the following chart

<u>Points</u>	<u>GPA Points</u>	<u>Grade Letter</u>	<u>Result</u>
88-100	4.0	AA	Passed
81-87	3.5	BA	Passed
74-80	3.0	BB	Passed
67-73	2.5	CB	Passed
60-66	2.0	CC	Passed
53-59	1.5	DC	Conditionally Passed
46-52	1.0	DD	Conditionally Passed
35-45	0.5	FD	Failed
0-34	0.0	FF	Failed

Design: Your program should consist of Java instructions to display the following information (NOTE: Use your own name as the student's name):

```
Please enter the grading weight (percentages) for the following categories:
Quizzes: 10
Homework: 20
Midterm Exam: 30
Final Exam: 40
Please enter the what Joseph Ledet earned for each category:
Quizzes: 100
Homework: 50
Midterm Exam: 80
Final Exam: 60
Joseph Ledet passed CSE 101 with a score of 68.0, GPA points of 2.5, and a grade letter of CB
```

Your program should change to positive if the teacher used negative values:

```
Please enter the grading weight (percentages) for the following categories:  
Quizzes: -10  
Homework: 25  
Midterm Exam: 25  
Final Exam: 40  
Please enter the what Joseph Ledet earned for each category:  
Quizzes: 60  
Homework: 50  
Midterm Exam: 40  
Final Exam: 50  
Joseph Ledet conditionally passed CSE 101 with a score of 48.5, GPA points of 1.0, and a grade letter of DD
```

Your program should check to make sure the user percentage values that sum to 100:

```
Please enter the grading weight (percentages) for the following categories:  
Quizzes: 10  
Homework: 30  
Midterm Exam: 30  
Final Exam: 40  
ERROR: The values sum to 110 but should sum to 100.
```

Code and Test: Create variables to store the values entered by the teacher and assign it using a Scanner object.

Grading:

MS Teams Submission: You can submit multiple times, however, we will only grade the last version that you submitted.