

ECE160: Foundations of Computer Engineering I

Homework #3 (Spring 2023)

Assigned: **February 24, Friday**

Due by: **9am, March 3, Friday**

Instructions:

1. Please follow the “[Submission Guidelines](#)” in the Homework section of the course website to submit your answers (program files) to the class M: drive by the deadline.
2. Please create a subfolder name “hw3” under your “homework” folder and submit your files there. Suggested format for naming your solution files: [hw3-your last name-p#.cpp](#)
For example: [hw3-xing-p1.cpp](#) for problem 1; [hw3-xing-p2.cpp](#) for problem 2
3. Relevant lecture notes: [Lecture #10, #12, & Lecture #13](#)

Problems:

1. Write a complete C program that can perform the following consecutive tasks:
 - a. reads 10 integers from the keyboard. You are required to use a [while](#) loop to read the numbers.
 - b. computes the sum of all the input integers that are greater than or equal to 7, and
 - c. prints the sum.

Please test your program using the following input. The correct output should be 34.

1 2 3 4 5 6 7 8 9 10

2. Write a program that prints the following **two patterns** separately one below the other as shown below. Use (nested) [for](#) loops to generate the patterns. All asterisks (*) in each pattern should be printed by a single [printf](#) statement of the form [printf\(“*”\);](#) In other words, [printf\(“***”\);](#) [printf\(“*****”\);](#) ... are not allowed.

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