

*Self-Assessment Quiz*¹

CISC 121

The purpose of this quiz is to give you a basis on which to decide whether you should take either CISC-101 or CISC-110 (your choice) before CISC-121. If you have trouble answering these questions, you should do that.

Answer the following questions using any programming language you know. Exact syntax is much less important than a solid understanding of the programming techniques required to answer the questions. Do not hand in your answers. Decide for yourself if you have serious difficulty answering the questions.

Question 1: Write a program that reads an integer from the user and then prints out the number of factors the integer has. For example, if the integer is

12

the output would be

6

since 12 divides by 1, 2, 3, 4, 6 and 12.

Question 2: Write a procedure/method that takes a positive integer parameter and prints the number that results from adding up the digits of the parameter. For example, if the parameter has the value 367, your procedure should print 16. Your procedure must not contain any input statements.

Question 3: Write a function/value-returning method that takes two integer parameters and returns the real value obtained by dividing the first parameter by the second parameter. If the second parameter is 0, your function should return 0.

Question 4: Write a program that creates a two-dimensional array with 500 elements, and fills the array with an alternating pattern of 0's and 1's.

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