

COP 2535: Data Structures

Quiz 05, Chapter 6 – Functions

Instructions

Answer the following questions in writing. These are short answer questions. Upload your answers in Canvas as plain text. Please include your name in the text.

1. Give an informal definition of *function*.
2. What are the differences between a function *prototype*, a function *header*, and a function *call*? What are the parts to a function header?
3. What is the difference between a *void* function and a *value-returning* function? Why would you use one rather than the other?
4. How are values passed into functions when the functions are called? What is the difference between *call by value* and *call by reference*?
5. How do you pass a parameter to a function by value? Does it make a difference if the value is a primitive data type, such as `int` or `char`, or a reference value type, such as `string` or an object?
6. How many values can you return from a function? (This is a trick question, please think twice about your answer.)
7. What does `system()` do? What is its return value? Give an example of its use.
8. Are global variables automatically initialized when declared? If so, what are they initialized to? Are local variables initialized when declared? If so, what are they initialized to?
9. What is the purpose of declaring a *global constant*? (Not in book) What is a *symbolic constant*, and why would you want to use one?
10. What is the purpose of a *static local variable*? Give an example of a case where you would want to use one.
11. What does `exit()` do? Why would you call this function?