1. (6 pts) What is a one-dimensional array in C? Show an example, including a memory snapshot to illustrate your answer.

2. (4 pts) Explain the distinction between an element of an array and its corresponding array subscript.

3. Write C statements to accomplish each of the following tasks. Assume these statements will be executed in the order shown.

   a. (3 pts) Declare an array named x that can hold 100 double values. Do not initialize the values.

   b. (3 pts) Set the value of the first element of the array x to NUM (assuming NUM is a symbolic constant defined above your code).

   c. (6 pts) Write a for loop that sets each remaining value of x to the value of the preceding element plus 0.1 (e.g., second element is first + 0.1).
d. (3 pts) Print the value of the last element of x.

4. (4 pts) Write ONE C statement that will BOTH (a) create an int array named y that can hold 50 integers, and (b) initialize all of its elements to 0.

5. (10 pts) Write a void function named printReverse that takes one double array named d and one int named n as arguments, where n is the number of elements in d. This function must print the n array values in reverse order, last element first, and first element last. Separate the printed values by spaces and/or newlines.

6. (5 pts) Explain the meaning and purpose of a “custom header file” such as “stat_lib.h” discussed on page 235 (or p. 229 if using 3rd Edition).

End of Hw5