**C++ I/O, Types, Declarations, and CppUnitLite**

1. Write a program that prompts the user to enter an int, a double, and a string on the command line. Read the values into variables of the appropriate data type with std::cin. Write the 3 values to std::cout. This program does not require the use of CppUnitLite.
2. Write CppUnitLite tests which verifies std::stringstream. These test will follow the pattern shown in the lesson 1 discussion *Use stringstream instead of atoi and sprintf*. Write separate tests to:
   * read and write a double
   * read and write a float
   * read and write a string
   * Initialize a stringstream with the "Hello". Attempt to stream this value into an int variable. Write a check that verifies this fails.

Be sure to use CHECK\_DOUBLES\_EQUAL for float types and CHECK\_EQUAL for other types.

1. Write a CppUnitLite test that uses new to allocate an array of 10 integers. Initialize the array with the values 0 to 9. Use CHECK\_EQUAL to verify the array has the correct values. Use delete to deallocate the array.
2. Write a CppUnitLite test that creates a std::vector of int. Add 10 integers to the vector with the values 0-9. Use CHECK\_EQUAL to verify the vector has the correct values.

<https://canvas.uw.edu/courses/1177926/assignments/3927353?module_item_id=7889507>