You may do these problems in any order you wish (feel free to go back and forth between them). Please type your answers into the Skype instant message – be sure to indicate which question is being answered. Partial credit can be granted for each question.

No questions during the exam are allowed – all necessary instructions are outlined here. You will have 30 minutes for the exam, to start once you finish reading this. You may refer back to these instructions anytime during the exam.

Instructions:

- **Problems 1, 2, and 3 (40%):** These contain code 'snippets'. You need to find issues with the code. These can be logic issues, syntax issues, memory issues, or common-sense issues. If you are unsure if something is really an issue, type it in anyways – there is no penalty for answering extra or non-issues; points are docked only for failing to find the actual issues. Use of Visual Studio or other compiler is **NOT** allowed here. Pen & paper are allowed.
    - 1.jpg: This is a self-contained function. Any issues you find will be in the DoSomething function.
    - 2.jpg: This is a flawed assignment operator function from a typical Array class. Any issues you find will be inside this function. Assume that every other part of this Array class (not shown) is coded correctly.
    - 3.jpg: This contains a mini Array class (fully inline). There are several issues in the code (which may or may not cause compilation issues). Any issues you find will be in the given code (i.e. do not worry about missing header files).

- **Problem 4 (10%):** This contains a function that outputs a value. Assuming this function is called from main(), what will the actual output be? Use of Visual Studio or other compiler is **NOT** allowed here. Pen & paper are allowed. You must show how you arrived at the answer to get credit for it. No partial credit for this question.

- **5 – Level9.txt (50%):** You should open your Level 9 code in Visual Studio (or other compiler). The pricing parameters are in the 5-Level9.txt file.
    - **Exact**: No special instructions for this; just run your code for the provided inputs.
    - **Monte Carlo:** You should use NSIM=1,000,000 and NT=75.
    - **FDM:** If you cannot get a reasonable output here, don't worry – simply type that into Skype as your answer.