Engineering and Applied Science Programs for Professionals
Whiting School of Engineering
Johns Hopkins University
605.621 Foundations of Algorithms
Programming Assignment Guidelines

Typically, the programming assignments will be designed where you will implement algorithms and compare their performance on data sets of your choosing. For these assignments, you are required to submit source code, adjustable inputs, outputs, and a brief description of your conclusions and a text **ReadMe** file. These programs typically complement individual problems in the homework assignment for the modules in which it is assigned. To facilitate the grading of programming assignments, the following additional requirements must be followed:

- All source code and supporting materials (described below) shall be submitted as part of the assignment when your programming assignment is submitted.

    - **Python** is the preferred programming language for each programming assignment.
    - Specific instructions regarding version used to create your project and/or compiling instructions must clearly provided in the **ReadMe** file.
    - A main file that runs within the project you create must be provided.
    - All supporting files for the main class should be included in the submission.
    - Code must be documented. When commenting your code make sure to provide a brief list of any modification at the top of the code. Within your code you can provide specific detail. It is common practice to use JavaDoc-type comments at the start of a method that explains what the method is doing. In addition, the code should use method and function names that are "self-documenting." For example, use "index" rather than "i" or "data[ ]" rather than "a[ ]".
    - The **ReadMe** file must include a list of the files in the project, and specific instructions to run your code.

- The source code and supporting materials shall be zipped into an archive file where the name of that archive file will be <lastname>_<assignment#>.zip or <lastname>_<assignment#>.tar.gz (or whatever is appropriate to your compression software). The "#" should be replaced with the number of the assignment.

- When writing your programs, you need to instrument them in a way that the code produces an output file/results of the important points of its execution. Each student is free to include a switch in the code to permit the output to be turned on or off, but you are required to submit a file containing the ouput run(s) with your program. This could be included in your **ReadMe** file.

- Sample test results are required of all programming assignments. The results of each test run should appear in a file(s) (preferred ASCII) with two sections:

    - inputs
    - outputs

- It is not necessary for the input to use large data sets since they serve only to demonstrate proper functioning of the program. Therefore, feel free to provide the input on small data sets.