

CMSC423 Project 2
Handed out: 4/09/07
Due: 5/07/07

For this project, each of you will have to implement a program of your choice, either from the list provided on the syllabus page, or something you came up with yourselves. Please let me know, as soon as possible, what project you chose so that I can point you to the appropriate literature and test data.

Deliverables:

1. Source code
2. Test data (data I can use to run your code)
3. README file indicating how to compile and run your code
4. A 2-page write-up describing the problem solved by your program and the basic method you used to solve this problem.

More details:

As an example for the 2-page write-up, a possible outline of this text for project 1 would be:

- What are we trying to solve: find the highest-scoring alignment between two protein sequences given a table of similarity scores between these sequences.
- What is the biological significance: sequences with high similarity are likely related to each other and may have the same function
- Assumptions of our code: similarity matrix is given; alignment will include affine gap scores; a single sequence will be matched to a larger database
- Implementation details: implemented the Smith-Waterman algorithm using affine gap scores as described in the lecture notes. Specifically, ...

If your project contains a graphical component, you should also provide several screenshots.

Submission:

Email me and Behjat your code and a README file that describes how to compile, install, and run your code.

Grading! We will grade all aspects of the code, including how “pretty” it looks.

Specifically pay attention to the following aspects:

1. Please make sure that your code works as advertised in the README file you provided. If your code doesn't work as indicated in the README file you will automatically lose 50% of the grade for this assignment.
2. Please provide copious comments and format your code so that it is easy to read. Part of your grade will be based on the formatting of the code.

IMPORTANT:

- Make sure the README file contains all necessary information both on how to compile the code, how to run it, and prerequisites (e.g. needs BioJava) - in project 1 several of you failed to provide enough information.

Please contact me as soon as possible if you have any questions regarding this assignment, or if you “get stuck” and might not be able to complete the assignment on time. Once the assignment is due I will no longer accept any excuses.

Good Luck!