Final Project

1.    Read a survey of DNA motif finding algorithms articles (Word-based algorithms section) from <http://www.biomedcentral.com/1471-2105/8/S7/S21>

2.    Choose one of the methods from Word-based algorithms section.

3.    Read the reference paper about the method you choose.

4.    Write a short report about the method that includes: problem description, method description, and the applied algorithm as pseudo code. (20 points)

5.    Implement the method (15 points) or a simplified version so long as it still solves the problem. If you simplify make the changes clear in your description.

6.    Evaluate the method by comparing it with exhaustive motif finding you have done previously.  Use plot a log/linear graph of "problem size" (x axis linear) vs. "total time to solve problems set" (y axis log).  (10 points). If this graph is not informative. Plot the graph log/log.

7.    What is the run time for the new method as a function of problem size? Use (f (n) to express the function complexity where n is the problem size) For this study do a log/log plot . (10 points)

8.    Describe the advantages and disadvantage for the method ?   (5 points)

Notes:

- You will submit the report in pdf and the complete code in zip file

- Always provide a citation in your code if any parts of the code were downloaded from the Internet, or translated from pseudo code.