

Homework Assignment

Given a set of sequences, write a program that will compute the minimum cost phylogenetic tree, using the BLOSUM62 substitution matrix.

There are 19 short sequences with no gaps.

That's roughly 8.2×10^{21} possible trees.

You will turn in:

- Your source code

- A description of your search algorithm (not the scoring part)

- Your lowest-cost tree (with score)

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Some suggestions:

Write the scoring function first

Build a ClustalW guide tree as an example of a low-cost tree (but probably not the global minimum)