

1. Design

1.1. IdealParScoring.java

1.1.1. My design for IdealParScoring involved me creating a matrix of data driven futures, `s`, in the constructor. And, in the function `scoreSequences`, wrapped inside a `finish`, I used an `async-await` inside two nested for loops (for `xLength` and `yLength`) to calculate the first value, second value, and third value needed to compute the input for an entry in the matrix using the Smith-Waterman algorithm.

1.2. UsefulParScoring.java

1.2.1. My design for UsefulParScoring involved me creating a matrix of data driven futures, `s`, in the constructor. And, in the function `scoreSequences`, wrapped inside a `finish`, I used an `async-await` inside two nested for loops (for `xLength` and `yLength`) to calculate the first value, second value, and third value needed to compute the input for an entry in the matrix using the Smith-Waterman algorithm.

2. UsefulParScoring.java Measurements

2.1. Execution time, SeqScoring.java:

2.2. Execution time, UsefulParScoring.java: 1min, 41 seconds