Bioinformatics Algorithm Club - organizing
We plan to meet every three weeks to discuss bioinformatics algorithms and their implementation while enjoying some pizza🍕.

Everyone is encouraged to write a pseudocode and implement it in any programming language from scratch (ex/ C++ or Python) to participate in the club (details are outlined below).

Schedule: Monday 6:00 pm every three weeks starting from Jan 22, 2024. Davison Life Sciences B118

Session I

1. Introduction to the problem
2. Pseudocode
   > multitude of approaches (brute force, divide and conquer, branch and bound, greedy, recursive, dynamic programming, deterministic vs randomized algorithm)
3. Implementation strategies
4. Evaluating the correctness of the algorithm, writing test code, obvious and contrived cases of input and output
5. Discuss mathematical foundation, data wrangling, and Interpreting results/alternative explanations and output formats.

For the session, three people will voluntarily present the pseudocode and mathematical background for the first 30 minutes. Then, in the latter half, a discussion on nuances in pseudocode, implementation strategies, and other aspects will be continued.

Session II (Three weeks after Session I)

1. Present the implementation.
2. Interpret the results.
3. learnings

The fun session! We will take turns sharing and discussing our excellent implementations of the algorithm! Everyone else deposits the implementation of their code in the shared repo for the club before we meet for session II. If possible, someone will voluntarily sign up to write test code (first) along with their implementation. Deposit the test code (both source code and executable) at least the Saturday before the week for session II.

Any ideas for algorithms to implement are welcome!