# Assignment 4: String Search
# Computational Genomics

**Objectives**: Become familiar with searching for substrings within a larger text using the Boyer Moore algorithm.

**Tasks**:
1. Accept the assignment at https://classroom.github.com/a/08twE9R9
2. Clone the repository
3. In `src/boyer_moore.py` implement the `boyer_moore_search` and `get_bad_char_table` functions.
4. Add new experiments to `src/string_search.py` that explore the runtime improvements that Boyer Moore offers over naive search.
   > *HINT: Does the size or character distribution in the patter or text differentially affect the runtime of either algorithm? When is naive search better? What is the worst case for Boyer Moore?*
5. Create figures that demonstrate the results of your experiments.
6. Update `README.md` and `doc/string_search.tex` (or similar) to include your new experiment.
7. Push your final code to GitHub.
8. Submit your final PDF to Canvas.