I worked on the following parts in this project:

I implemented the recursive algorithm for the part 2. I debugged the code, got results, and filled the relevant parts of part 2 in the report. I answered the questions and commented on them.

I wrote the readme.txt file.

I wrote the code for argument parsing.

I wrote the code for third question in part 2 and questions in part 3. I used timing out to get results in a reasonable amount of time. I experimented on p and k values, analyzed the results and answered the questions in part 3.