

- 1) Who were the other team members?
  - a. I was solo-ing for the group project, so I was the only member (Joshua Bih).
- 2) Under whose netid is the readme-team.pdf, code, and other material saved?
  - a. Since I'm solo, all the material is saved either locally or in my GitHub repository.
- 3) How much time did you personally spend on the project, and what did you do?
  - a. I spent probably around 7-8 hours on this assignment. Obviously, I did all of the assignment myself. I'd say it took around 2 hours to get started on working the assignment and getting input to be read into a class. Then it took about 30 minutes to generate input and about 2 hours fine-tuning the verify function. The rest of the time was spent adding extra stuff the assignment requires for output, bug-fixing, and just making other QoL edits to the code for readability or efficient or both.
- 4) What did you personally learn from the project, both about the topic, above programming and code development techniques, and about algorithms.
  - a. For the topic itself, obviously I learned that brute forcing is incredibly inefficient and that backtracking would be far more efficient. Regarding coding, I became a lot more proficient in both the usage and understanding of generators. It's a lot better, especially in brute force or just situations with extremely large variables, to use generators to avoid the creations of unnecessary lists, etc. With generators, you can simply stop once a flag has been triggering. I also hadn't written to an excel file in a while, which is simply a useful thing to learn. I didn't end up developing a backtracking algorithm since I'm working solo, but I did obviously use the brute-force algorithm. I've also used a lot of functions to help break up the code into a more readable format and implemented a lot of QoL mechanics in case the user wants to change the way the program works.
- 5) In your own words, how did the team dynamics work? What could be improved? (e.g. did you use GitHub and if so did it help, did you meet frequently enough, etc.)
  - a. Obviously, there was no team dynamic, but I did use GitHub to help document the project process.
- 6) From your own perspective, what was the role of each team member, and did any member greatly exceed expectations (and if so how/why), or vice versa.
  - a. Again, I did this solo. I'd say I did pretty good, though, I guess.