

- Identifies you and your programming partner by name

The people who worked on this project are Dylan Chelo and Nick Powers

- Acknowledges help you may have received from or collaborative work you may have undertaken with others

The only help we got was from our Edstem post asking about how to run Rust on the homework server because we were forgetting to connect with the -y flag.

- Explains what routine in the final um takes up the most time, and says whether the assembly code could be improved and how

In the final um the thing that takes the most time is `map_seg` or more specifically, growing the `Vec`. Looking at the assembly code there are a good amount of `pop` calls so maybe there is a way to reduce the number of those but otherwise I think it would be hard to improve.

- Says approximately how many hours you have spent analyzing the problems posed in the assignment

We spent around 4 hours analyzing the problems as we were already familiar with the code we wanted to get right into trying to optimize it as soon as we could.

- Says approximately how many hours you have spent solving the problems after your analysis

We spent approximately 20 hours solving the problems after analysis.