

CW2 Kyle Spicer  
Module J  
dinner Writeup  
Due Date: September 22, 2022

### **Project Summary:**

Given a text file with a list of name/time to complete eating combinations, we are to open, read, parse the information and find the best position for a waiter to collect the plates most efficiently to allow the most people to eat. The waiter moves in a clockwise position and the program needs to calculate the waiter beginning at each index and which index would allow the most people the full time to eat before their plate was removed.

### **Challenges:**

Pointers - Effectively using pointers and pointers to pointers proved difficult for me to comprehend and use. At first I was copying data into a function, manipulating that data, and not truly storing it properly. After troubleshooting, I found my error and gained a better understanding of how to pass pointers, manipulate data in a function, and store that data for further use.

Looping – Once I had the container to hold the pointers for my structs, I was able to iterate through them, but being able to restart once I reached the last address took me some time. I found a way, but I believe I could have been more efficient in completing this task.

### **Successes:**

Memory Allocation – I was able to allocate memory and free it in a function pretty easily. First, I created everything in main, once it was functional, transferring the logic into a function was easy. Using valgrind to verify no leaks were present went well too.

Design – When given a project, I want to read through the requirements and begin coding, but that is never the best approach for me. I took my time, drew out on paper what the project requirements were and went step by step to create the logic on paper first.

### **Lessons Learned:**

Take time to think. Programming is a marathon of problem solving and keeping pace is extremely, especially for someone like myself who tends to overthink and stress unnecessarily. I took my time, thought out my design and what structures/functions I wanted to use and the coding portion came much easier.