# Planning Document – Nicolas Sanchez Assignment 3: Winning the lottery

## Planning Phase

The planning phase for this assignment was just me reading through the assignment pdf and writing notes for ideas on how the code is gonna work. This didn't take much time because linked lists have been pretty easy to understand so I haven't had much of a struggle getting comfortable with them and thinking how to use them.

## Assistance Received

I didn't receive any assistance for this assignment. I can't even recall googling much, just me and vscode.

## Debugging Phase.

I had 2 major bugs during my process. The first one was remembering to reset the head of the linked list so that the last node in the list knows to point to the head again, keeping the circle intact. This was resolved quickly after realizing I needed to do this. The second major but was a horrible struggle. I was getting a segfault for accessing bad memory. I spent hours looking through my code, questioning if my code was written correctly and if I even understood what I was writing. Eventually, I found that I had a double for loop with i and j but was indexing i++ on both loops. I was relieved to have found this error but definitely was not happy with the amount of time I had wasted.

## Testing Phase

My testing phase started with just the sample test case. After I got that working Guha sent out an announcement mentioning a test case where a group's skip is equal to 0. I wasn't sure if my code could handle that so I ran it with this type of test case and I was given an incorrect answer. I then wrote some code to deal with something like this and got everything working. It was basically just dequeuing. Then I just made some simple test cases just to make sure everything was working and everything was.

After making my code look nice and removing any nonsense whitespace, I went through my program like usual and traced it all to reinforce my understanding of my own code. After this, I just did a final test to make sure everything was working fine.