

## WRITEUP- Hanoi Tower

Went to lab and watched some YouTube video to get a better understanding of the problem. All codes are written by me except the header file is provided by the lab. Took some time to figure out how the constructor and destructor work because they are really different from c++. Also, the `stack_push()` and `stack_peek()` need to return `items[s->top-1]`, otherwise it won't return the correct top disk number. I feel like using recursive is much easier for this assignment. It's really hard to keep track on all stacks and it's very easy to get a wrong answer. Also, it took me a while to figure out the pattern of the moves. I wrote down all the steps in my DESIGN.pdf. To verify my answer of the stack implementation. I compared the moves to the recursive method. For the switch function in the `main()`, I used Boolean variable to store the user input. Calling the stack and recursive function after the switch function can avoid errors caused by inputting argument in different order, ex: `-r -n 5 -s`.

Cite: <https://www.youtube.com/watch?v=rf6uf3jNjbo>