Programming Assignment IV

İlayda ATMACA 21827101

Hacettepe University Department of Computer Engineering BBM104 Introduction to Programming Laboratory II Programming Assignment IV

PROBLEM DEFINITION

Creating our own stack and queue structures, editing the input files given to us and printing these results to output files.

STEPS OF ALGORITHM

- 1. Read the files.
- 2. These input files are saved to the structures we use for stack and queue.
- 3. Create methods such as pop, push, peek for stack, and queue.
- 4. Create methods to use stack structure and queue.(for example removeGrater,calculateDistance...)
- 5. Update stack and queue files and create output file.

THE METHOD OF SORT

In my sortStack method, I first created a new stack to create the sort state.

I used 2 nested loops. In my first loop, if my stack was not empty, I synchronized it to an integer using the pop method. In my second nested loop, if my new stack is not empty and my integer value is greater than the peek value, I let the loop start.

I used the pop method of my new stack value in my loop, and I pushed that value back into the existing stack, so I constantly deleted the element in my new stack unless it was sorted correctly. If my integer value is greater than the peek value, I now have the elements added to my stack correctly when it doesn't meet its condition