Report of Assignment 4

Hacettepe University Computer Engineering

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Problem Definition

The purpose of this assignment is to learn stack and queue with data structures.
Making a stack or queue classes and writing yourself instead of the default stack and queue methods.

Steps of Algortihm

In this assignment, I created seven class, Their name is Stack, StackControl, Queue, QueueControl, ReadFromFile, Write and Main. In Stack and Queue class, I override Stack and Queue methods. In StackControl and QueueControl class, I created operations that I should use and I created ReadFromFile and Write class for File I/O.

Complexixty of a method that In Stack Class

CalculateDistance method:

There were a lot of algorithm to find distance but I used this method because I think this is the most effective
I created an algorithm that provide walk around elements. I used a a for loop in a while loop to change index in CalculateDistance method. In this way I could find the difference between two elements respectively. After finding every difference, I had these values in absolute value and I added a variable whose initial value is zero.