

HACETTEPE UNIVERSITY

DEPARTMENT OF COMPUTER ENGINEERING



Student

Name :

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Department : Computer Engineering

PROGRAMMING ASSIGNMENT 4

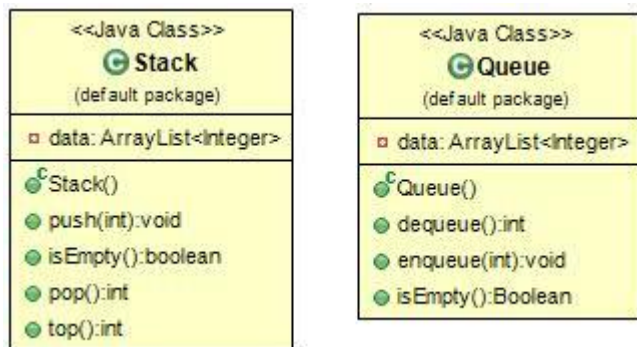
Subject: Stack and Queue Operations
Programming Language: Java

PROBLEM

In this homework we have to implement stack and queue. After implement basic stack and queue function, the homework also want handle some special function such sort stack or find distinct element number.

METHOD AND SOLUTION

For solution these problem first of all I created two class first one stack.java and second one is queue.java. these class are objects and include special function for stack and queue. These class represent as below.



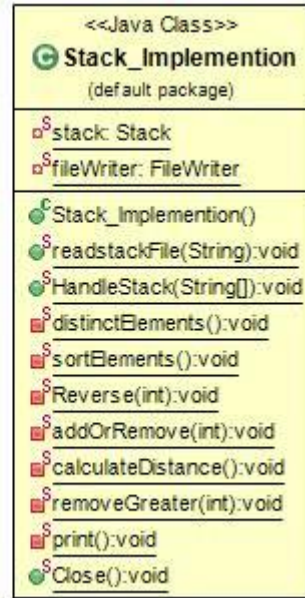
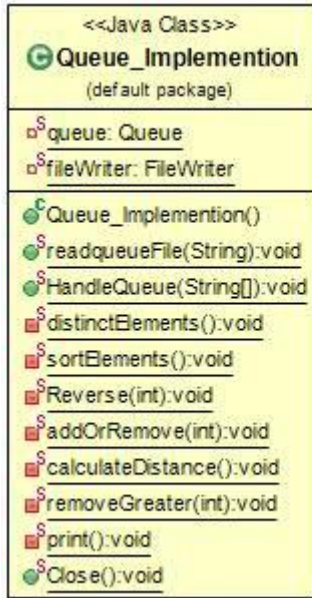
Stack:

`Push(int)` → add new item to stack
`isEmpty()` → return boolean, stack is empty or not
`pop()` → remove top element from stack and return it
`top()` → just return top element from stack

Queue:

`dequeue()` → remove first element added to queue.
`enqueue(int)` → add new element to queue
`isEmpty()` → return boolean queue is empty or not

After created this model. I start to handle input file command. For handling these command I created two class `Queue_Implementation` and `_Implementation`. In class represent as below.



RESULT

In this assignment I review java programming basic. I learn what is stack and queue how we can use these data structures

Not : Project root must contain stack.txt and queue.txt files. As result I generate stackOut.txt,queueOut.txt and rewrite stack.txt and queue.txt files.