CSSE230: Stacks and Queues

# Name(s):

# Analysis

**Table 1:** Big-Theta runtimes of enqueue and dequeue for 4 implementations of the Queue ADT:

|  |  |  |
| --- | --- | --- |
| **Implementation** | **Enqueue runtime** | **Dequeue runtime** |
| LinkedList |  |  |
| ArrayList |  |  |
| Two stacks |  |  |
| Growable circular array |  |  |

# Part 2: Discussion

Justify each of the runtimes in Table 1, as described in the specification:

**LinkedList**

enqueue:

dequeue:

**ArrayList**

enqueue:

dequeue:

**Two** **stacks**

enqueue:

dequeue:

**Growable circular array**

enqueue:

dequeue: