RP #4 - Grading Criteria

Note: The Grading Criteria for the Recitation Programs will differ significantly from the Individual Programs. Since you "know" if you got the problem correct, it's expected that only correct solutions will be submitted, for the most part. But since these programs have been specifically chosen to map to certain concepts in the class, significant points will be deducted if those concepts aren't properly used. The goal with these programs is to provide extra practice without a ton of time on the grader's end. Thus, the grading criteria will give very few points to any incorrect submission, and will deduct significant points if some key concept isn't properly displayed. For this assignment the key concept implementing each data structure: stack, queue and priority queue.

Points for Correct Submission Picture and Corresponding Code: 15 pts, if picture isn't submitted or if code is incorrect, give a maximum of 5 pts here.

Efficient Stack Implementation: 5 pts (O(1) push, pop), **can only be earned with correct submission**

Efficient Queue Implementation: 5 pts (O(1) push, pop), **can only be earned with correct submission**

Efficient Priority Queue Implementation: 5 pts (O(lg n) insert, delete max), **can only be earned with correct submission**

Use of Dynamic Memory etc: 5 points (feel free to deduct some points if memory wasn't freed, or if a VLA was used, or any other poor practice)

Bounds Discussion: 5 pts total

2 points for imagining the worst case and working out the number of operations for a slow priority queue,

3 points for a set of bounds that clearly would work for an efficient priority queue but not one with an O(n) delete min and O(1) insert.

So, an incorrect solution can get a maximum of 15 points (5 pts submission picture, 5 pts dynamic memory use, 5 pts bounds discussion)