

CONCORDIA UNIVERSITY  
DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING  
COMP 6651: Algorithm Design Techniques  
Winter 2022  
Quiz # 6

<b>First Name</b>	<b>Last Name</b>	<b>ID#</b>
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**Question 1:** 5 points

Statement of the problem (1 point)

Dynamic programming algorithm (or at least the relation of the current problem and its sub-problem) (2 points)

Data structure to minimize the space requirements (1 point)

Time and space complexity (1 point)

**Question 2:** 5 points

Description of Quack\_Push, Quack\_Pop, Quack\_Pull (Exercise 8.6 in course pack), 1.5 point for each function pseudo code (total 4.5 points).

Justify the amortized complexity: 0.5 point