

## ITRW222

### TEST 7 (5)

Name/ Naam: \_\_\_\_\_

Nr \_\_\_\_\_

Explain why it is better to remove an element from the head side of the linked list than at the tail side of the list in the pop/dequeue methods of restricted structures.	Verduidelik waarom dit beter is om 'n element aan die kopkant van die geskakelde lys te verwyder eerder as aan die stertkant in die beperkte strukture metodes vir "pop" en "dequeue".
<p>The head-side is easier since only the "head" instance variable needs to change – except when there are only one element in the list. This operation is <math>O(1)</math>.</p> <p>If the tail-side, the list must be traversed since the second last element's next field should be updated as well to be set to "null" There is no way to access the second last element without traversing the list which is a <math>O(n)</math> operation.</p> <p>Since <math>O(1)</math> is better than <math>O(n)</math> the head-side deletion is better than the tail-side deletion.</p>	

### TEST 8 (6)

Explain The following 3 terms of hashing:	Verduidelik die volgende 3 terme van "hashing"
1. Hash function/ funksie:	
Operation to compute address based on a key value	
2. Pre-processing / Voorverwerking:	
Sometimes you need to perform some function before the hash function can be done	
3: Collision handling:/ Botsing hantering:	
When two keys yield the same answer in the hash function there is a collision which needs to be solved in order to allow the 2 values to be stored in different memory positions.	