

# Les 1 huiswerk

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## 1 Les

### 1.1 Big-O

Operation	ArrayList	LinkedList
Find(el)	$O(n)$	$O(n)$
PrintAll()	$O(n)$	$O(n)$
Get( $i$ )	$O(1)$	$O(n)$
Insert( $i$ , el)	$O(n)$	$O(1)$
Remove( $i$ )	$O(n)$	$O(1)$

LinkedList  $x_{\text{first}} \rightarrow x_1 \rightarrow x_2 \rightarrow \dots x_{\text{last}} \rightarrow \emptyset$

DoublyLinkedList  $\emptyset \leftarrow x_{\text{first}} \rightleftharpoons x_1 \rightleftharpoons x_2 \rightleftharpoons \dots x_{\text{last}} \rightarrow \emptyset$

### 1.2 Expressies

$\frac{6}{3-1}_{\text{infix}} = 6 \ 3 \ 1 \ - \ /_{\text{postfix}}$

Stack: []

[6]

[6, 3]

[6, 3, 1]

[6, 3, 1, -]

[6, 2]

[6, 2, /]

[3]

### 1.3 Stack

Operatie	Stack
Push	$O(1)$
Pop	$O(1)$
Top	$O(1)$

## 2 Opgave 1

abc