

#### 4.1 Theroie

Operation	best	average	worst
insert operation at the end of a single linked list	$O(1)$	$O(n)$	$O(n)$
insert operation at the end of a list backed by an array	$O(1)$	$O(1)$	$O(1)$
insert operation of a hash table	$O(1)$	$O(1)$	$O(1)$
contains operation of a list	$O(1)$	$O(n)$	$O(n)$
contains operation of a hash table	$O(1)$	$O(1)$	$O(n)$
insert operation at the end of a single linked list	$O(1)$	$O(n)$	$O(n)$
insert operation at the end of a list backed by an array	$O(1)$	$O(1)$	$O(1)$
insert operation of a hash table	$O(1)$	$O(1)$	$O(1)$
contains operation of a list	$O(1)$	$O(n)$	$O(n)$
contains operation of a hash table	$O(1)$	$O(1)$	$O(n)$

#### 4.2 What would be a suitable Java datatype to implement a FIFO-structure

A linked list