

Sets and maps

Gagnaskipan 2014

Hjalti Magnússon (hjaltim@ru.is)



HÁSKÓLINN Í REYKJAVÍK
REYKJAVÍK UNIVERSITY

17. febrúar 2014

Implementations of set

Method	Contains	Insert	Remove
Indexed array	$O(1)$	$O(1)$	$O(1)$
Unordered vector	$O(n)$	$O(1)$	$O(n)$
Unordered list	$O(n)$	$O(1)$	$O(n)$
Ordered list	$O(n)$	$O(n)$	$O(n)$
Binary search	$O(\log(n))$	$O(n)$	$O(n)$
BST (Average)	$O(\log(n))$	$O(\log(n))$	$O(\log(n))$
BST (WC)	$O(n)$	$O(n)$	$O(n)$