

COP 4516 1/13/26

Useful Language Tools

	Java	C++	Python	
lists (stacks, queue)	ArrayList Stack, Queue	vector stack queue	list <u>stack</u> queue in a list	$O(n)$ del min $O(1)$ add to end
priority queue	Priority Queue	priorityqueue	heapq	insert $O(\log n)$ deletemin Java Pyt deletemax C++
Set Unordered	HashSet	unorderedset	set	$O(1)$ insert delete search
Unordered Map	HashMap	unorderedmap	dictionary	Same as set but associate each item (key) w/ a value

Arup $\rightarrow 0$
 Jackson $\rightarrow 1$
 Holly $\rightarrow 2$
 Brad $\rightarrow 3$

Arup Holly
 Jackson Arup
 Brad Jackson

