

List VS DLL User Methods

List			DLL		
Method name	Return type	Explanation	Method name	Return type	Explanation
findFirst()		void			C == head
findNext()		void			C = C.next
--	--	--	findPrevious()	void	C = C.previous
retrieve()		T			return C.data
update(T e)		void			C.data = e
full()		boolean			return false
insert(T e)		void			Add node contain e after C and make it the C
remove()		void			remove C element and make the next of it C
empty()		boolean			Is the list empty? True if yes and false if not
--	--	--	first()	boolean	C.previous == null
last()		boolean			C.next == null

[] Require list not full

[] Require list not empty

Queue (FIFO) VS Priority Queue User Methods

Queue			Priority Queue		
Method name	Return type	Explanation	Method name	Return type	Explanation
enqueue(T e)	void	Add e to the queue in the end (tail)	Enqueue(T e, Priority p)	void	Add e to the queue according to p
serve()	T	Remove the head element and its value returned also head = head.next	serve()	PQElement<T>	e and p in head of PQ removed and returned
length()		int		return size of the queue	
full()		boolean		return false	

[] Require Queue / PQ not full

[] Require Queue / PQ not empty

Stacks (LIFO) User Methods

Method name	Return type	Explanation
push(T e)	void	Add e to the stack
pop()	T	Remove the last one added and return it also top = top.next
empty()	boolean	Stack is empty? True Otherwise false
full()	boolean	Return false

[] Require Stack not full

[] Require Stack not empty