

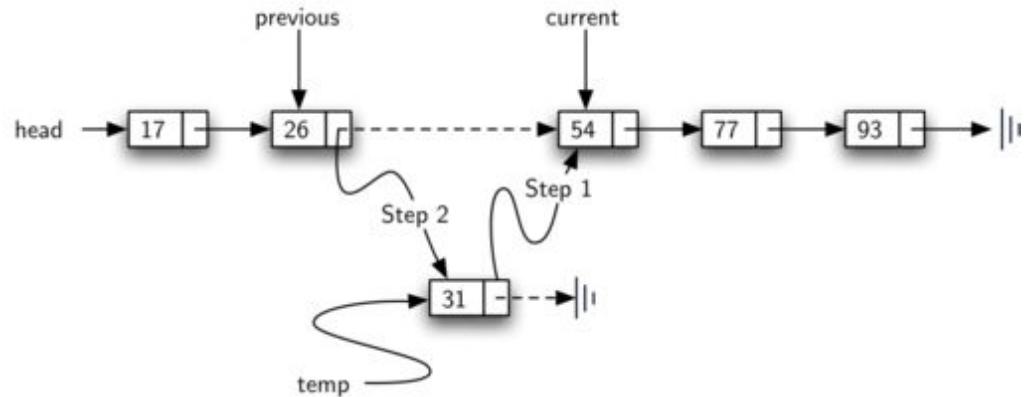
# ORDER LIST

By: Guillermo Andres De Mendoza Corrales



# Theory

A Common **List**, but it should **always** be ordered at all instances, so there is no need for the method insert or append, just an add() method



# Best implementation

The implementation in this case would be better for an ArrayList, since we could apply a binary search, which can't be done in a Linked List, and also the access is faster due the index allocation

Operation	ArrayList	LinkedList
Find position	$O(n)$ (or $O(\log n)$ with binary search)	$O(n)$
Insert element	$O(n)$	$O(1)$ after finding position
Access by index	$O(1)$	$O(n)$



# Add ( M )

Controller

M



# Add ( E )

Controller



# Add ( Z )

Controller



# Add ( S )

Controller



# Add ( C )

Controller

