SLList: A Singly-Linked List

Open Data Structures

SLList

A singly-linked list

SLList

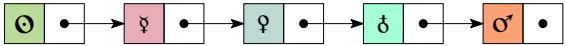
A singly-linked list

SLList

A singly-linked list

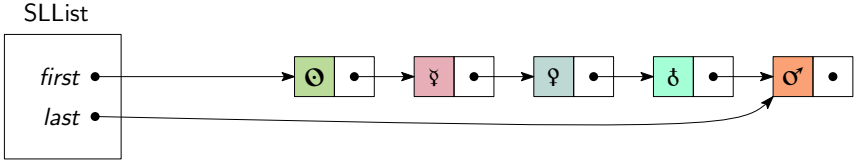
SLList

A singly-linked list



SLList

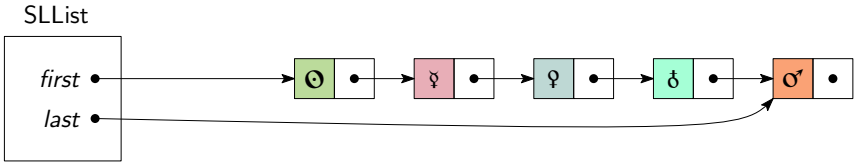
A singly-linked list



SLList

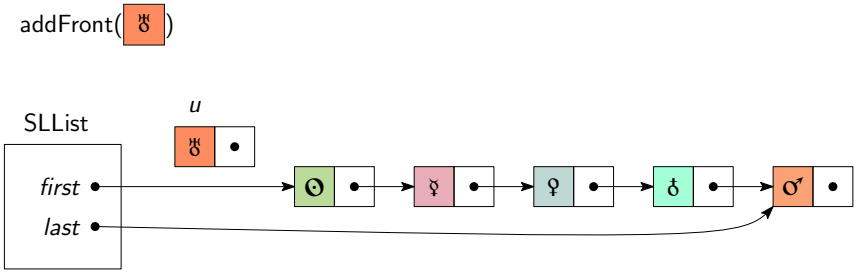
A singly-linked list

addFront(♅)



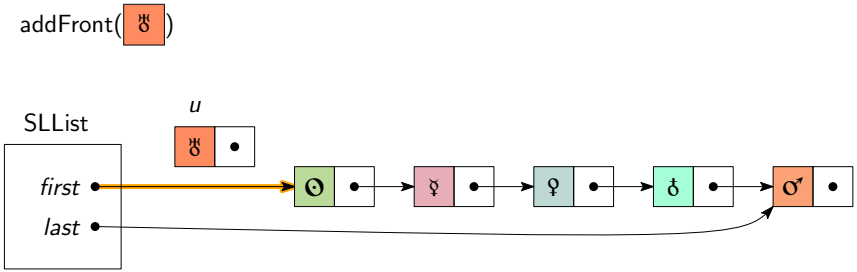
SLList

A singly-linked list



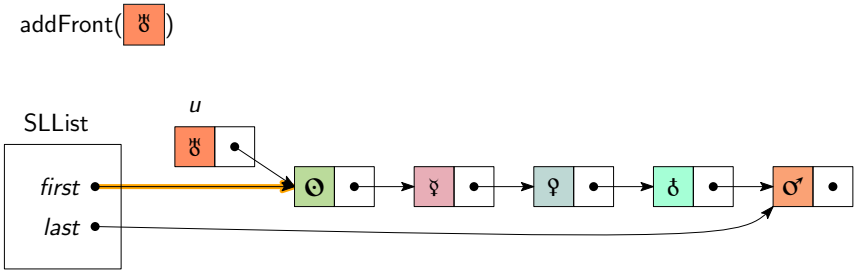
SLList

A singly-linked list



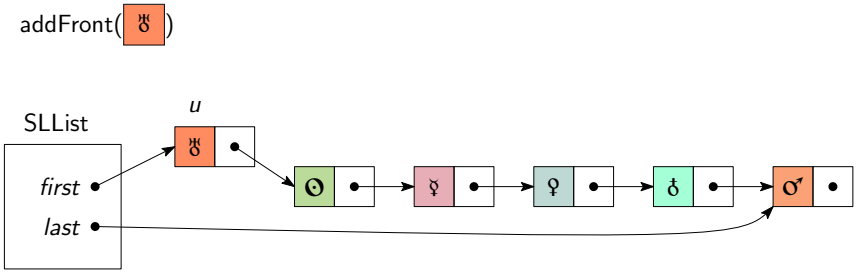
SLList

A singly-linked list



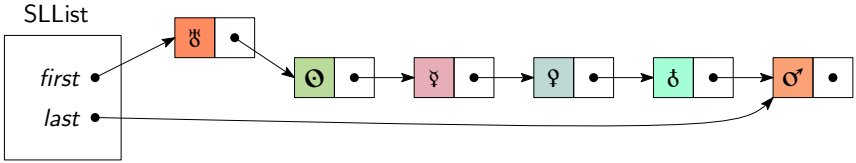
SLList

A singly-linked list



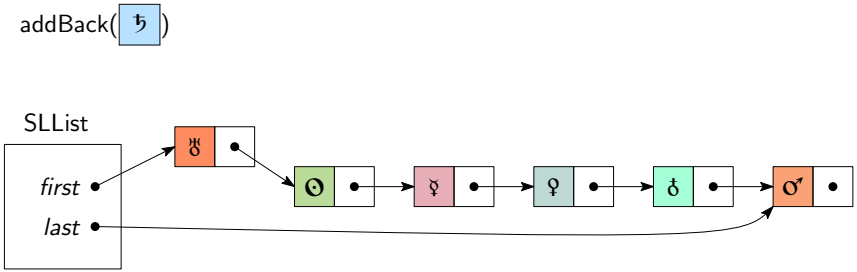
SLList

A singly-linked list



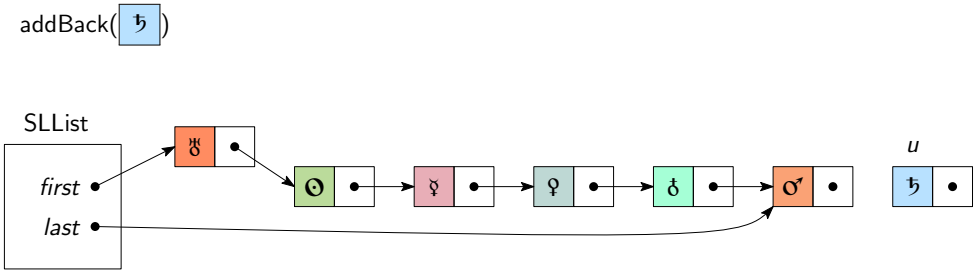
SLList

A singly-linked list



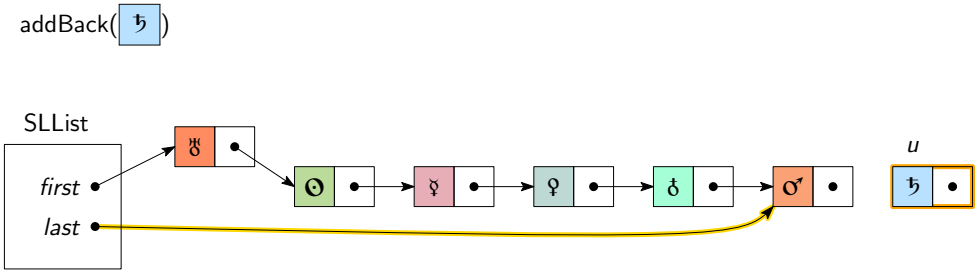
SLList

A singly-linked list



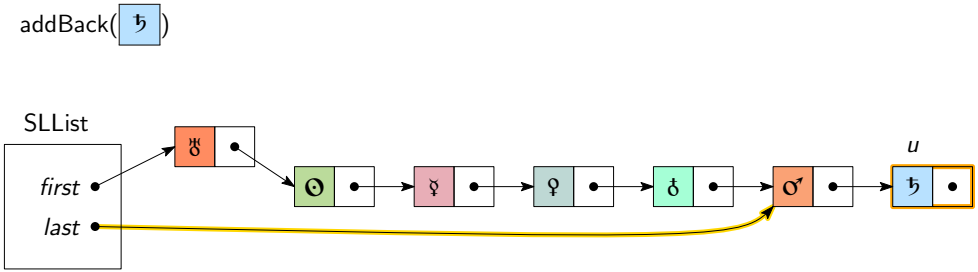
SLList

A singly-linked list



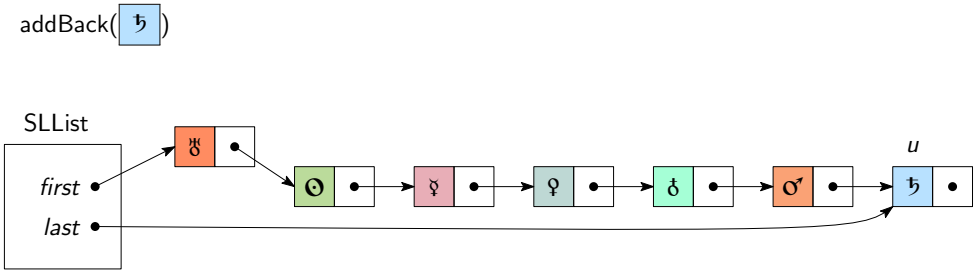
SLList

A singly-linked list



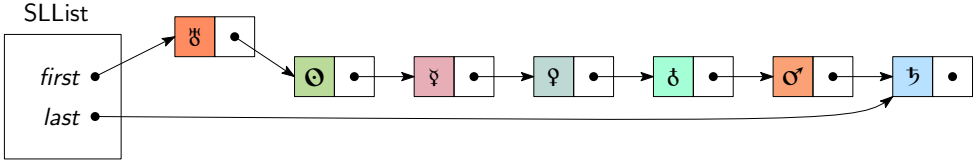
SLList

A singly-linked list



SLList

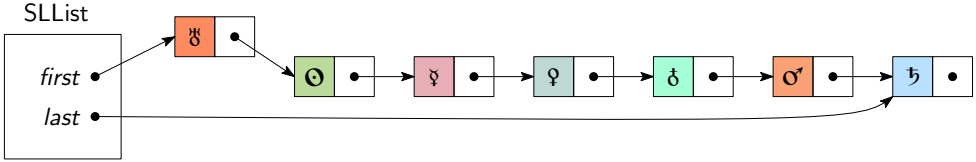
A singly-linked list



SLList

A singly-linked list

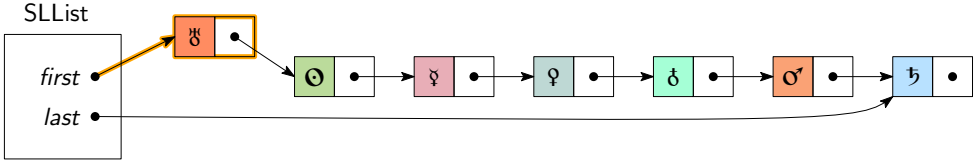
removeFront()



SLList

A singly-linked list

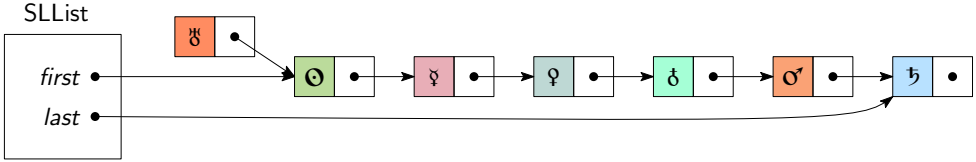
removeFront()



SLList

A singly-linked list

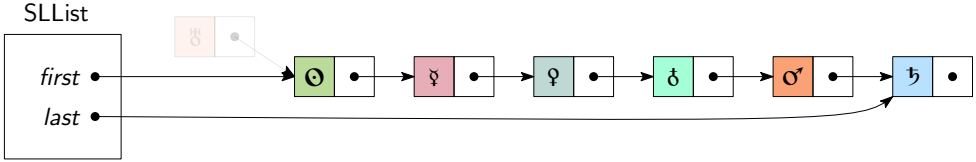
removeFront()



SLList

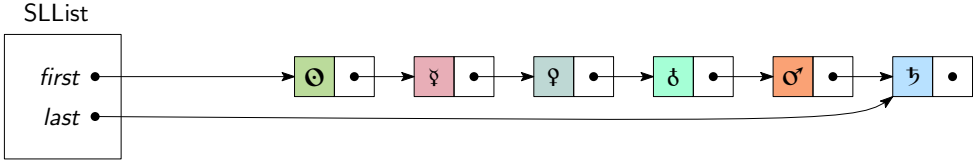
A singly-linked list

removeFront()



SLList

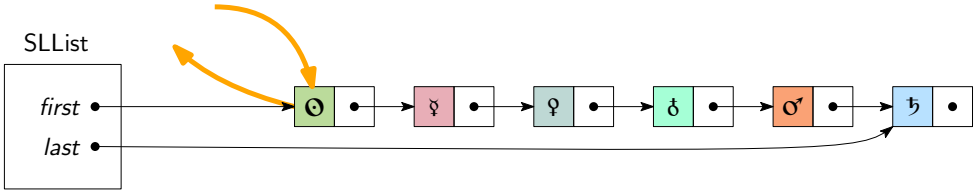
A singly-linked list



SLList

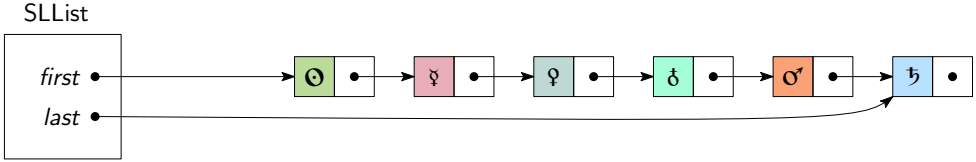
A singly-linked list

push(x) = addFront(x)
pop() = removeFront()



SLList

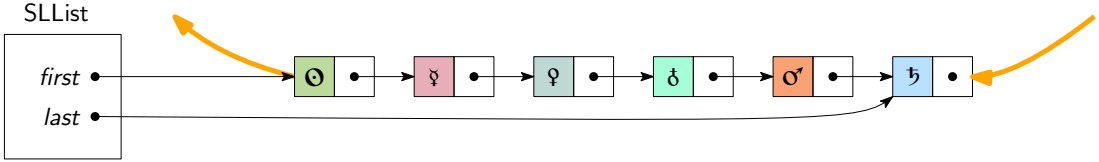
A singly-linked list



SLList

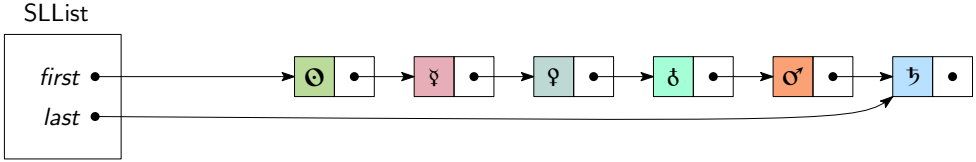
A singly-linked list

add(x) = addBack(x)
remove() = removeFront()



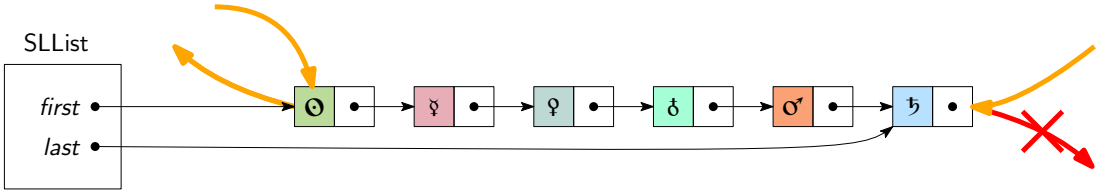
SLList

A singly-linked list



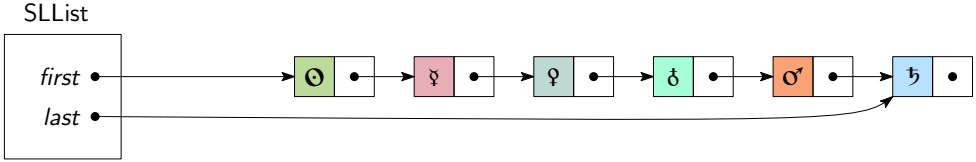
SLList

A singly-linked list



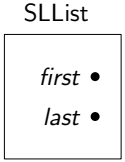
SLList

A singly-linked list



SLList

A singly-linked list

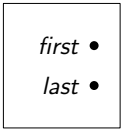


SLList

A singly-linked list

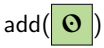
add()

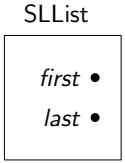
SLList



SLList

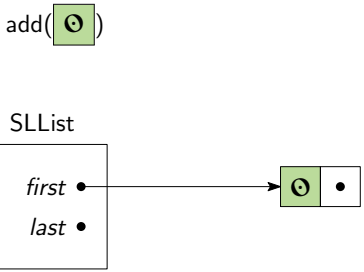
A singly-linked list





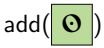
SLList

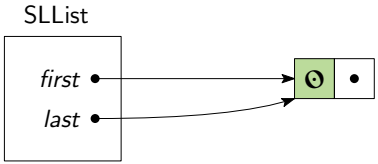
A singly-linked list



SLList

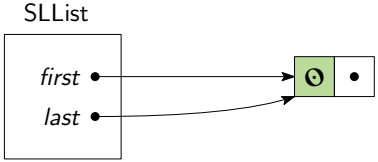
A singly-linked list





SLList

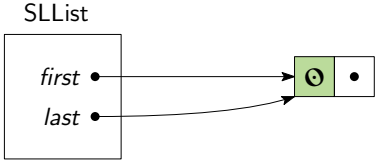
A singly-linked list



SLList

A singly-linked list

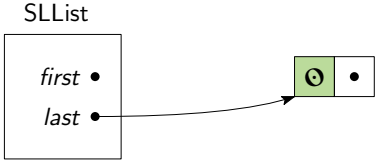
removeFirst()



SLList

A singly-linked list

removeFirst()



SLList

A singly-linked list

removeFirst()

SLList

A singly-linked list

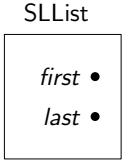
removeFirst()

SLList

SLList

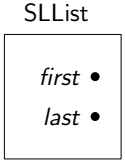
A singly-linked list

removeFirst()



SLList

A singly-linked list



SLList

A singly-linked list

Theorem

An SLList implements the Stack and (FIFO) Queue interfaces.

SLList

A singly-linked list

Theorem

An SLList implements the Stack and (FIFO) Queue interfaces.

- Stack operations push(x) and pop(x) each run in $O(1)$ time;

SLList

A singly-linked list

Theorem

An SLList implements the Stack and (FIFO) Queue interfaces.

- Stack operations push(x) and pop(x) each run in $O(1)$ time;
- Queue operations add(x) and remove(x) each run in $O(1)$ time.

End of Lesson