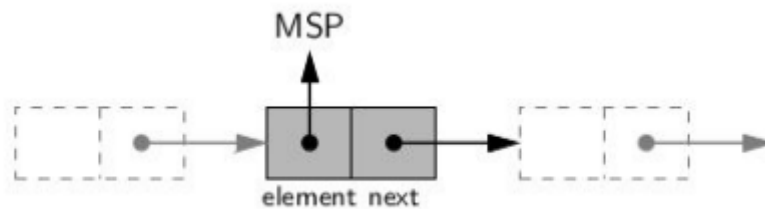
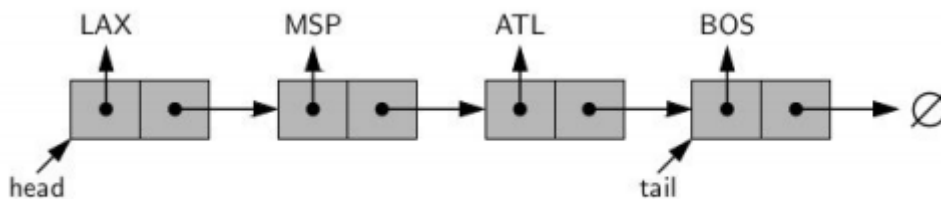


## Listas Ligadas

Singly linked list, in its simplest form, is a collection of nodes that collectively form a linear sequence. Each node stores a reference to an object that is an element of the sequence, as well as a reference to the next node of the list.



Example of a singly linked list whose elements are strings indicating airport codes. The list instance maintains a member named head that identifies the first node of the list, and in some applications another member named tail that identifies the last node of the list. The None object is denoted as  $\emptyset$ .



### Inserting an Element at the Head of a Singly Linked List

An important property of a linked list is that it does not have a predetermined fixed size; it uses space proportionally to its current number of elements. When using a singly linked list, we can easily insert an element at the head of the list. The main idea is that we create a new node, set its element to the new element, set its next link to refer to the current head, and then set the list's head to point to the new node.

### Removing an Element from a Singly Linked List

Removing an element from the head of a singly linked list is essentially the reverse operation of inserting a new element at the head.

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