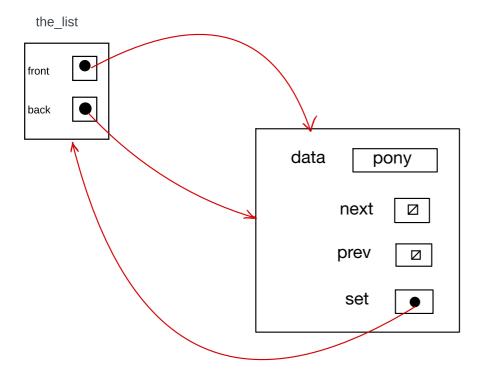
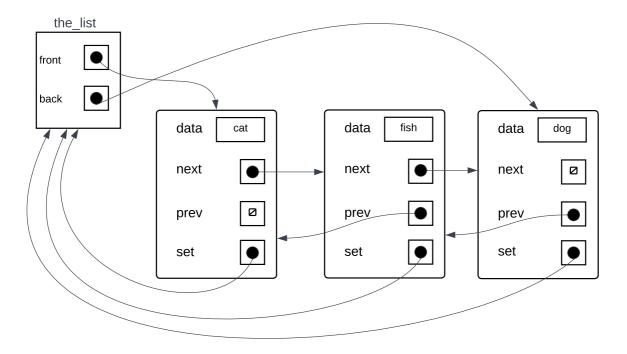
the_list.make_set("pony")



The function call creates the first node inside the list, sets its' value to "pony" and returns a reference to the newly created node.

What does the following function call do to this object? What does the function return?

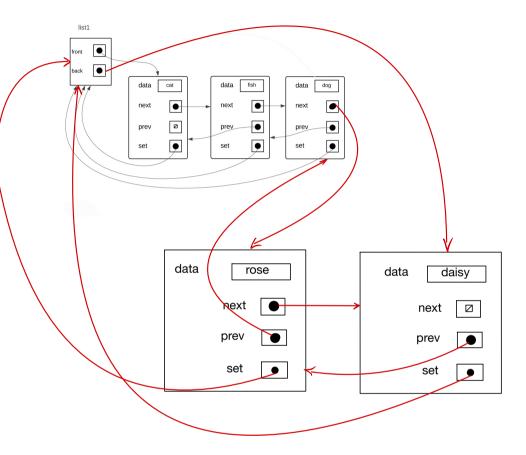
the_list.make_set("pony")



As the list is not empty, the function call doesn't change its's contents and returns None

What does the function call do to these objects? What does the function return?

list1.union_set(list2)



list2

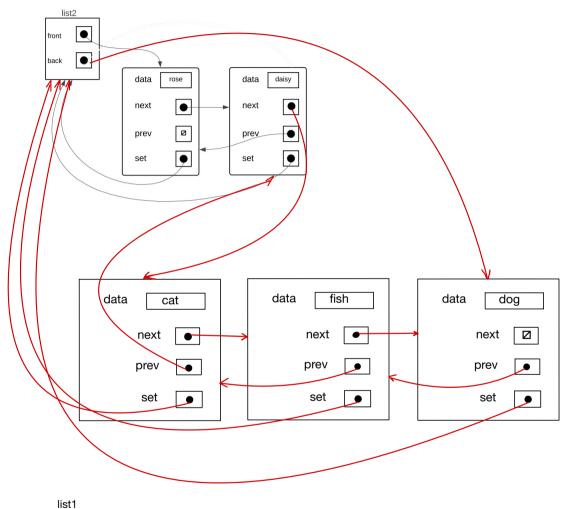
front Ø

back Ø

The function transfers the nodes from the second list to list1 and returns the number of transferred elements (in our case 2).

What does the function call do to these objects? What does the function return?

list2.union_set(list1)

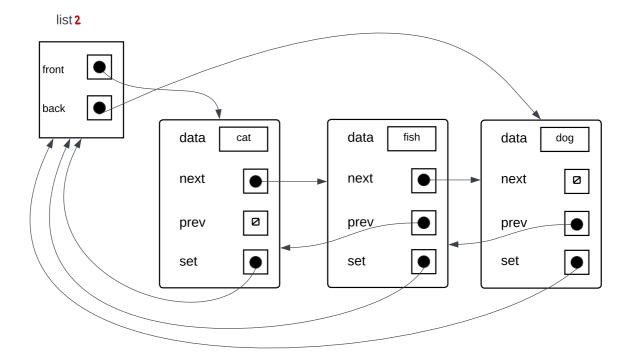


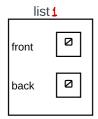
front Ø

The function transfers the nodes from the first list to list2 and returns the number of transferred elements (in our case 3).

What does the following function call do to these objects? What does the function return?

list2.union_set(list1)

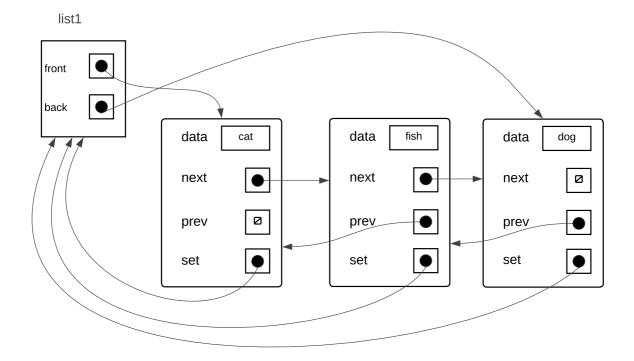


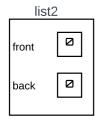


The function call will transfer all of the nodes in list1 to list2, leaving the list1 empty, and return the number of the transferred objects (3).

What does the following function call do to these objects? What does the function return?

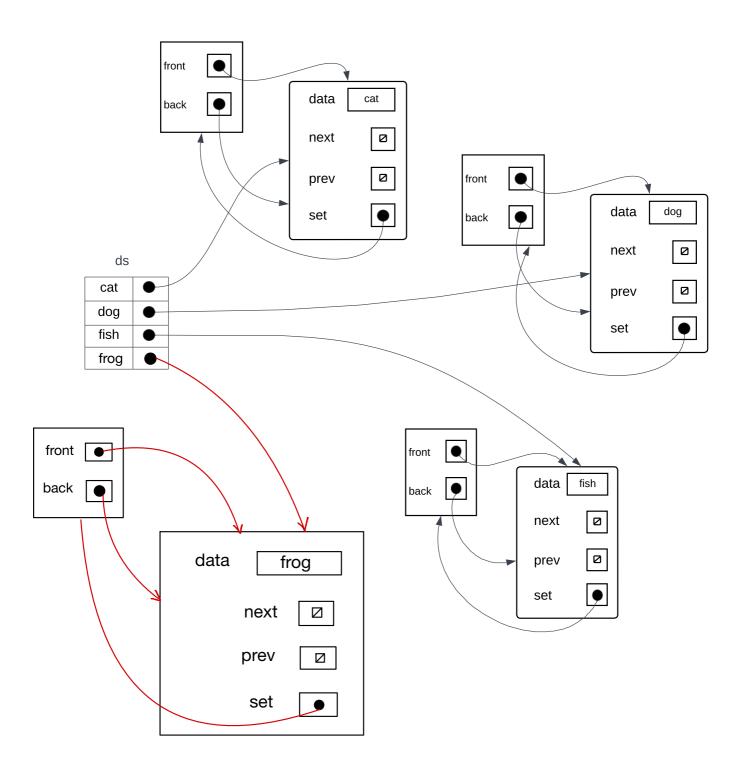
list1.union_set(list2)





The function call won't change anything because the list we are trying to transfer the objects from is empty. (Returns None)

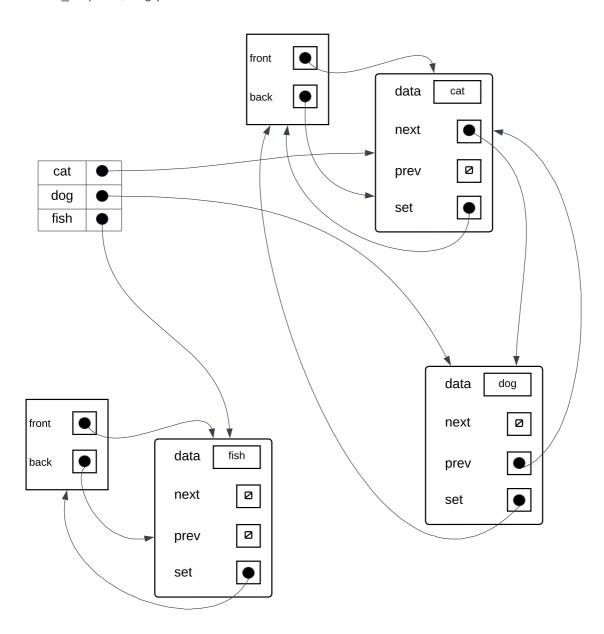
ds.make_set("frog")



The function call creates a new SetList object containing only one node containing the passed value.

It also creates a new dictionary entry - "frog": reference to the newly created node. The function call returns True.

ds.union_set("fish","dog")



The elements "fish" and "dog" already exist in the DisjointSet, therefore the function call won't make any changes and will return False.