

cis112_2025_1_midterm_1_linkedListAppend

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Introduction

A linked list is a sequence of linked nodes. See `Nodes.java` and `LinkedList.java` for class definitions.

Implementation

In the file `LinkedListUtility.java`, complete the method, `unionAppend(LinkedList list1, LinkedList list2)` which appends list2 after list1 but omits elements that are already in list1. After execution of the method, list1 changes but list2 remains intact.

list 1	list 2	list 1 after UnionAppend
a, b, c, d	f, a	a, b, c, d, f
a	a	a
a, b	d, e, f, g	a, b, d, e, f, g

An algorithm in pseudo-code is as follows:

```
For every node n in list2 {  
    if n.data is not in list1 {  
        append n to list1 as list1's last node  
    }  
}
```

C-like

Testing

Complete `StudentInfo.java` with your data.

Test your code with `TS_LinkedListUtility_jUnit.java`.

Note that there are 5 test cases and only `zz_jUnitWorking` passes in the default case, i.e., without any changes done.