

# cis112\_2025\_1\_midterm\_1\_intersection

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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, `intersection(LinkedList list1, LinkedList list2)` which returns intersection of the lists list1 and list2. The order of elements in  $\text{list1} \cap \text{list2}$  is the same as in list1.

list 1	list 2	list 1 $\cap$ list 2
a, b, c, d	f, a	a
a, b, c	c, a, d	a, c
a, b	d, e, f, g	

An algorithm in pseudo-code is as follows:

```
create an empty list: resList
For every node n in list2 {
    if n.data is in list1 {
        append n to resList
    }
}
return resList
```

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.