实验一、Lab03 Linked lists

一、实验目的

Be familiar with the node construction of single-linked and double-linked tables, and the methods related to single-linked and double-linked tables.

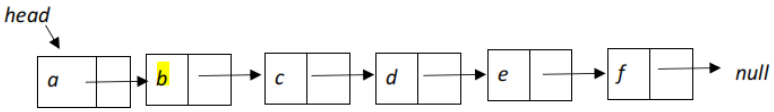
二、使用仪器、材料

Eclipse, PrecessOn

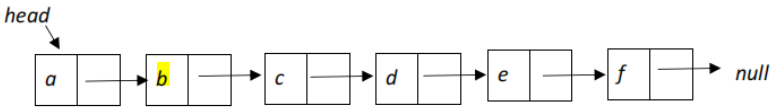
三、实验内容

Given the linked list, what will happen to the list after the code segment is executed? If the code segment returns a reference, what object does this reference point at?

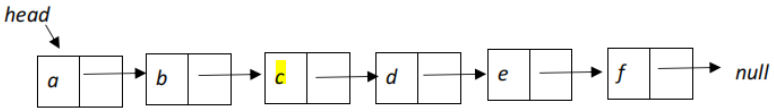
***this*.head.getNext()**



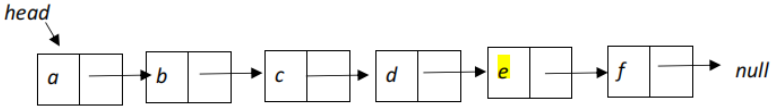
***this*.head.setNext(new Node("n"))**



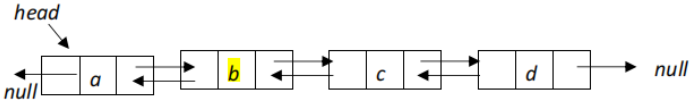
***this*.head.getNext().setNext(new Node("n"))**



***find*(size() – 2).setNext(null)**



***find*(size() – 2).setPrevious(null)**



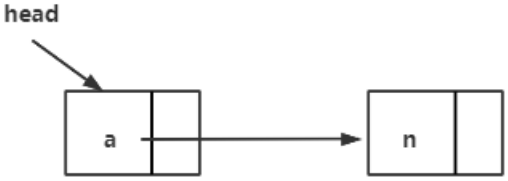
四、实验步骤及过程记录

1. this.head.getNext():

The list will not change, but you will get a reference which point at the successor of head which content a element 'b'.

2. this.head.setNext(new Node("n"):

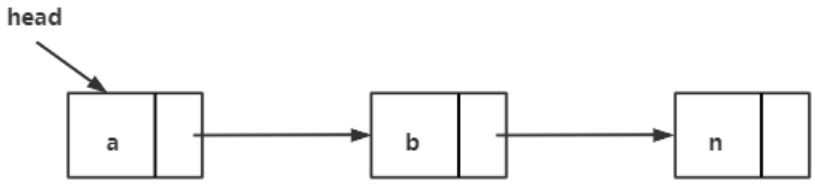
The head's successor will turn into a new node which content a element 'n'.It means that the list will only remain head nodes and newly created nodes.



No reference will be returned.

3. this.head.getNext().setNext(new Node("n"))

Fristly, you will get a reference which point at head's successor.Then you will use this reference to turn it's successor to a new node which content a element 'n'.The list will only remain these three points.

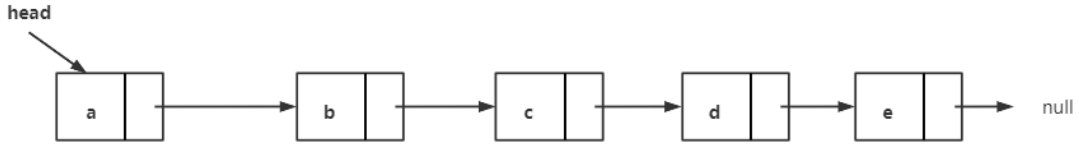


No reference will be returned.

4. find(size()-2).setNext(null)

Fristly, you will get a reference whose index is 4. It content a element 'e'. Beacause the size of list is 6 and the index of head is 0. Then you will turn its successor to null.

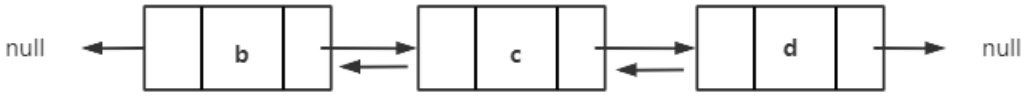
No reference will be returned.



5. find(size()-2).sePrevious(null)

Fristly, you will get a reference whose index is 2. It contents element 'c'. Then you will turn its predecessor to null.

No reference will be returned.



五、实验收获与体会

In-depth understanding and mastery of single-linked tables and double-linked tables.