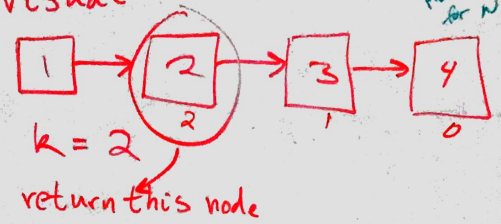
Problem Domain

Given a number k return the kth node from the end of a LinkedList

Assumptions Made
- Node Class
- Linked List Class available
- Pass Head & Current properties to LL class
- Has Value & Next for Node Class

Visual



Big O

Time O(n)

Space O(1)

Algorithm

- Count "Length" of Linked List
- Ensure k < length
  - if greater return exception
  - else find node • using for loop
- return node

Pseudo

```
NodeFinder
Input // num k
Output // node
Counter ← 0
Current = Head
While current ≠ null
        Counter ← counter+1
        Current ← Current.Next
Current ← Head
for i ← 0  i < counter-k  i+1
        Current ← Current.Next
return Node
```

Code <code> implement in Visual Studios

Test

- K > Length
- K < Length
- Different Input Types