

2) (10 pts) DSN (Linked Lists)

Complete the following user defined function that reconstructs the structure of a singly linked list. The function will take a pointer to the head of some list along with the number of nodes n and move the first half the nodes to the back of the list while the other half moves up to the front. **For grading purposes, please write your solution iteratively, with NO recursion.** The function will return the new head of the list. **You may assume that the original list has an even number of elements and is not empty.** The following figure shows the scenario.



Before flipHalf



After flipHalf

```
typedef struct node_s {  
    int data;  
    struct node_s* next;  
} node_t;  
  
node_t * flipHalf(node_t * head, int n) {  
  

```

```
}
```