

2) (5 pts) ALG (Linked Lists)

Suppose we have a singly linked list implemented with the structure below and a function that takes in the head of the list.

```
typedef struct node_s {
    int data;
    struct node_s * nextptr;
} node_t;

void whatDoYouDo(node_t * head) {
    node_t * temp = head;
    node_t * temp2 = head->nextptr;
    int a;

    while(temp->nextptr != NULL) {
        a = temp->data;
        temp->data = temp2->data;
        temp2->data = a;

        temp = temp->nextptr;

        if(temp->nextptr != NULL) {
            temp = temp->nextptr;
            temp2 = temp->nextptr;
        }
    }
}
```

If we call whatDoYouDo(head) on the following list, show the list after the function has finished.

head -> 5 -> 2 -> 1 -> 8 -> 7? Please fill in the designated slots below.

head → 2 → 5 → 8 → 1 → 7

Grading: Each slot is worth 1 pt. All or nothing. No partial credit.