

1) (5 pts) ALG (Dynamic Memory Management in C)

The struct below is used to define a node in a linked list. Below it is a function, *freeList*, that is given a pointer to the front/head of a linked list. The function is supposed to free all the dynamically allocated memory associated with the linked list that the given pointer is pointing to. Unfortunately, the function does not work. Explain why the function doesn't work and propose a fix to the function, **in words only, conceptually explaining the order in which the key steps have to be executed.**

```
typedef struct node {
    int data;
    struct node* next;
} node;

void freeList(node* front) {
    if (front != NULL)
        free(front);
    if (front->next != NULL)
        freeList(front->next);
}
```

Problem(s) with current code**Proposed fixes (conceptually, in words)**