

Suppose we have a singly linked list implemented with the structure below. Write a **recursive** function that takes in the list and returns 1 if the list is non-empty AND **all** of the numbers in the list are even, and returns 0 if the list is empty OR contains at least one odd integer. (For example, the function should return 0 for an empty list, 1 for a list that contains 2 only, and 0 for a list that contains 3 only.)

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

int check_all_even(struct node *head) {
```