```cpp
ListNode* doubleNum(ListNode* head, int& carry){
    if (head && head->next)
        doubleNum(head->next, carry);

    int doubleVal = (head->val + head->val + carry) % 10;
    carry = (head->val + head->val + carry) / 10;
    head->val = doubleVal;
    return head;
}

ListNode* doubleIt(ListNode* head) {
    int carry = 0;
    ListNode* result = doubleNum(head, carry);
    if (carry)
        return new ListNode(carry, result);
    return result;
}
```