

leetcode Problem - 3 (725)
(split linked list in parts)

```
int getLength(struct ListNode* head) {
    int length = 0;
    while (head != NULL) {
        length++;
        head = head -> next;
    }
    return length;
}

struct ListNode** splitListToParts(struct ListNode* head, int k, int* returnSize) {
    int length = getLength(head);
    int partSize = length / k;
    int remainder = length % k;
    struct ListNode** result = (struct ListNode**) malloc(k * sizeof(struct ListNode*));
    *returnSize = k;
    for (int i = 0; i < k; i++) {
        int currentPartSize = partSize + (i < remainder ? 1 : 0);
        if (currentPartSize == 0)
            result[i] = NULL;
        else {
            result[i] = head;
            for (int j = 0; j < currentPartSize - 1; j++)
                head = head -> next;
        }
        struct ListNode* temp = head -> next;
        head -> next = NULL;
        head = temp;
    }
    return result;
}
```

Output: head = [1, 2, 3]

k = 5

[[], [2], [3], [], []]