

1.Split Linked List in Parts.

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```
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
/**
 * Note: The returned array must be malloced, assume caller calls free().
 */
struct ListNode** splitListToParts(struct ListNode* head, int k, int*
returnSize) {
    struct ListNode **ans = (struct ListNode **)calloc(1, sizeof(struct
ListNode *) * k);
    struct ListNode *prev;
    int base, len = 0, part = 0;

    for (struct ListNode *temp = head; temp; temp = temp->next) {
        len++;
    }

    base = len / k;

    for (int i = len % k; i > 0; i--) {
```

```

        ans[part] = head;
        part++;

        for (int i = 0; i < (base + 1); i++) {
            prev = head;
            head = head->next;
        }

        prev->next = NULL;
    }

    if (base) {
        for (int i = part; i < k; i++) {

            ans[part] = head;
            part++;

            for (int j = 0; j < base; j++) {
                prev = head;
                head = head->next;
            }

            prev->next = NULL;
        }
    }

    *returnSize = k;

    return ans;
}

```

Output:

Accepted Runtime: 0 ms

- Case 1
- **Case 2**

Input

```
head =  
[1,2,3,4,5,6,7,8,9,10]
```

```
k =  
3
```

Output

```
[[1,2,3,4],[5,6,7],[8,9,10]]
```

Expected

```
[[1,2,3,4],[5,6,7],[8,9,10]]
```

Accepted

Runtime: 0 ms

• Case 1

• Case 2

Input

head =

[1,2,3]

k =

5

Output

[[1],[2],[3],[],[]]

Expected

[[1],[2],[3],[],[]]