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#include <stdio.h>
#include <stdlib.h>
// Definition for singly-linked list.
struct ListNode {
  int val;
  struct ListNode *next;
};
// Function to get the length of the linked list
int getListLength(struct ListNode* head) {
  int length = 0;
  struct ListNode* current = head;
  while (current != NULL) {
    length++;
    current = current->next;
  }
  return length;
}
// Function to split the linked list into k consecutive parts
struct ListNode** splitListToParts(struct ListNode* head, int k, int* returnSize) {
  int length = getListLength(head);
  int minPartLength = length / k;
  int extraNodes = length % k;
  struct ListNode** result = (struct ListNode**)malloc(k * sizeof(struct ListNode*));
  struct ListNode* current = head;
  for (int i = 0; i < k && current != NULL; <math>i++) {
    result[i] = current;
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int partLength = minPartLength + (i < extraNodes ? 1 : 0);</pre>
    for (int j = 1; j < partLength; j++) {
      current = current->next;
    }
    struct ListNode* nextNode = current->next;
    current->next = NULL;
    current = nextNode;
  }
  *returnSize = k;
  return result;
}
// Function to print the linked list
void printList(struct ListNode* head) {
  struct ListNode* current = head;
  while (current != NULL) {
    printf("%d -> ", current->val);
    current = current->next;
  }
  printf("NULL\n");
}
int main() {
  // Create a sample linked list
  struct ListNode* head = (struct ListNode*)malloc(sizeof(struct ListNode));
  head->val=1;
  head->next = (struct ListNode*)malloc(sizeof(struct ListNode));
  head->next->val = 2;
  head->next->next = (struct ListNode*)malloc(sizeof(struct ListNode));
  head->next->next->val = 3;
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head->next->next->next = (struct ListNode*)malloc(sizeof(struct ListNode));
  head->next->next->val = 4;
  head->next->next->next->next = (struct ListNode*)malloc(sizeof(struct ListNode));
  head->next->next->next->val = 5;
  head->next->next->next->next = NULL;
  printf("Original Linked List:\n");
  printList(head);
  int k = 3;
  int returnSize;
  struct ListNode** parts = splitListToParts(head, k, &returnSize);
  printf("\nSplit Linked List into %d parts:\n", k);
  for (int i = 0; i < returnSize; i++) {
    printf("Part %d: ", i + 1);
    printList(parts[i]);
  }
  return 0;
Original Linked List:
 -> 2 -> 3 -> 4 -> 5 -> NULL
Split Linked List into 3 parts:
Part 1: 1 -> 2 -> NULL
Part 2: 3 -> 4 -> NULL
Part 3: 5 -> NULL
..Program finished with exit code 0
Press ENTER to exit console.
```

}