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#include<stdio.h>

#include<stdlib.h>

struct ListNode {
    int val;
    struct ListNode* next;
}

int countNodes(struct ListNode* head) {
    int count = 0;
    struct ListNode* current = head;
    while (current != NULL) {
        count++;
        current = current->next;
    }
    return count;
}

int main() {
    // Create the linked list nodes
    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;
    head->next->next->next = (struct ListNode*)malloc(sizeof(struct ListNode));
    head->next->next->next->val = 5;
    head->next->next->next->next = (struct ListNode*)malloc(sizeof(struct ListNode));
    head->next->next->next->next->val = 8;
    head->next->next->next->next->next = NULL;
    int result = countNodes(head);
    printf("Number of nodes: %d\n", result);
}

```

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// Free the memory allocated for the linked list nodes

struct ListNode* current = head;

struct ListNode* next;

while (current != NULL) {

    next = current->next;

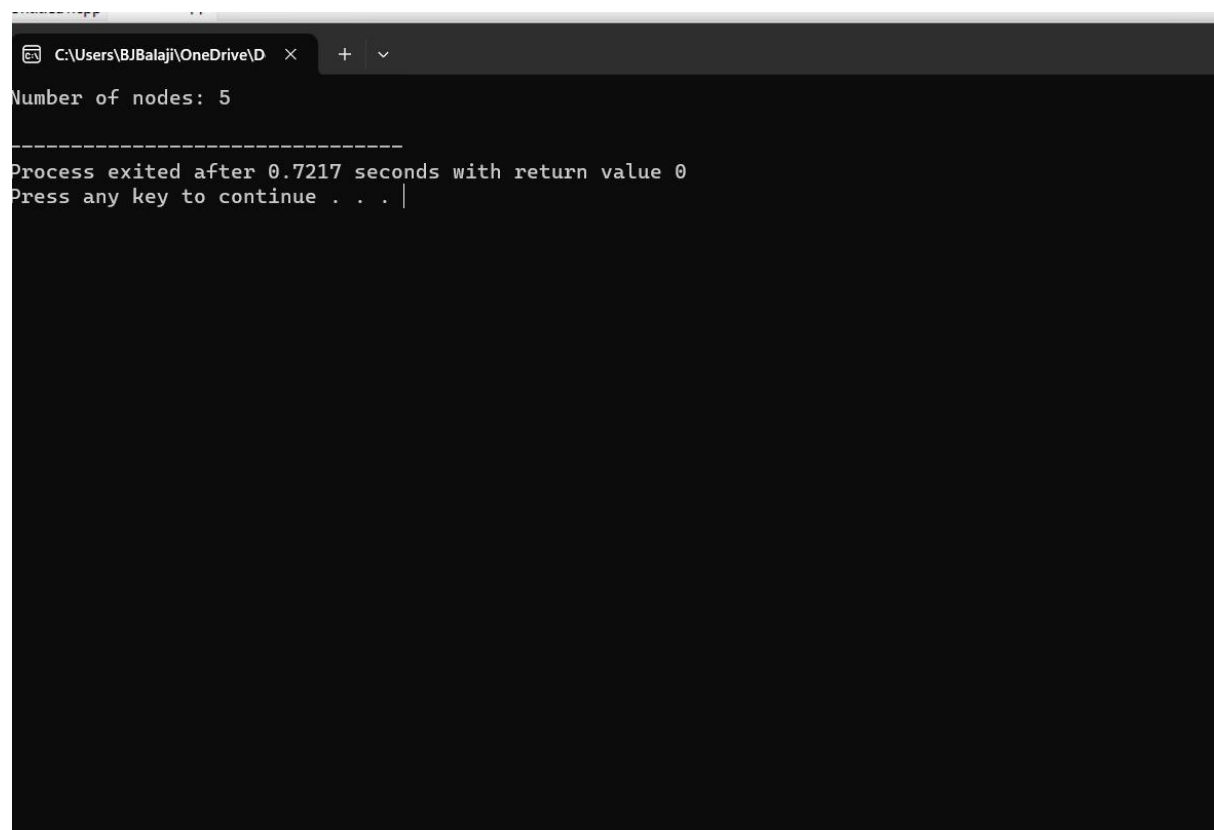
    free(current);

    current = next;

}

return 0;

}
```



```
cmd.exe
C:\Users\BJBalaji\OneDrive\D
Number of nodes: 5
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Process exited after 0.7217 seconds with return value 0
Press any key to continue . . . |
```