1. Write a C Program to Reverse a Linked List in groups of given size

```
#include<stdio.h>
#include<stdlib.h>
struct Node
{
int data;
struct Node* next;
};
struct Node reverse (struct Node head, int k)
{
struct Node current = head;
struct Node next = NULL;
struct Node prev = NULL;
int count = 0;

while (current != NULL && count < k)
{
next = current->next;
current->next = prev;
prev = current;
current = next;
 count++;
 }
if (next != NULL) {
head->next = reverse(next, k);
return prev;

}

void push(struct Node** head_ref, int new_data)
{
struct Node* new_node =(struct Node*) malloc(sizeof(struct Node));
```

```
new_node->data = new_data;
new_node->next = (*head_ref);
(*head_ref) = new_node;

}

void printList(struct Node *node)
{
while (node != NULL)
{
printf("%d ", node->data);
node = node->next;
}
}

int main(void)
{
struct Node* head = NULL;
push(&head, 8);
push(&head, 7);
push(&head, 6);
push(&head, 5);
push(&head, 4);
push(&head, 3);
push(&head, 2);
push(&head, 1);

printf("\nGiven linked list \n");
printList(head);
head = reverse(head, 2);
printf("\nReversed Linked list \n");
```

```
printList(head);
 return(0);

}
```