20May

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;  
};

pointer to the new head node. /  
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);  
}

Python Program to Exchange the Values of Two Numbers using ^ (exclusive or operator)

x=10  
y=12  
x = x ^ y;  
y = x ^ y;  
x = x ^ y;  
print ("After Swapping: x = ", x, " y =", y)