

Linked-List :- (Deletion)

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
struct Node {  
    int data;  
    struct Node * next;  
};
```

```
struct Node * createNode (int value)
```

```
{  
    struct Node * newNode = (struct Node *) malloc (sizeof (struct  
    Node));
```

```
    newNode->data = value;
```

```
    newNode->next = NULL;
```

```
    return newNode;
```

```
} // int main() { struct Node * head = NULL; struct Node * temp = NULL; int value; while (1) { printf("Enter a value: "); scanf("%d", &value); if (value == 0) break; struct Node * newNode = createNode(value); insertAtEnd(head, newNode); } }
```

```
void insertAtEnd (struct Node ** head, int value)
```

```
{
```

```
    struct Node * newNode = createNode (value);
```

```
    if (*head == NULL)
```

```
{
```

```
        *head = newNode;
```

```
}
```

```
else
```

```
{
```

```
    struct Node * temp = *head;
```

```
    while (temp->next != NULL)
```

```
{
```

```
        temp = temp->next;
```

```
}
```

```
    temp->next = newNode;
```

```
}
```

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```
void deleteFirst (struct Node **head)
```

```
{
```

```
if (*head != NULL)
```

```
{
```

```
struct Node * temp = *head;
```

```
*head = (*head) -> next;
```

```
free (temp);
```

```
}
```

```
void deleteFirst
```

```
void deleteEle (struct Node **head, int, value)
```

```
{
```

```
struct Node * curr = **head;
```

```
struct Node * prev = NULL;
```

```
while (curr != NULL && curr -> data != value)
```

```
{
```

```
prev = curr;
```

```
curr = curr -> next;
```

```
if (curr == NULL)
```

```
{
```

```
printf ("empty");
```

```
}
```

```
if (prev == NULL)
```

```
{
```

```
*head = curr -> next;
```

```
}
```

```
else
```

```
{
```

```
prev -> next = curr -> next;
```

```
}
```

```
}
```



```
free (current);
```

```
}
```

```
void deleteLast (struct Node **head)
```

```
{
```

```
if (*head == NULL)
```

```
{
```

```
printf ("empty");
```

```
}
```

```
struct Node *temp = *head;
```

```
struct Node *prev = NULL;
```

```
while (temp->next != NULL)
```

```
{
```

```
prev = temp;
```

```
temp = temp->next;
```

```
}
```

```
if (prev == NULL)
```

```
{
```

```
*head = NULL;
```

```
}
```

```
else
```

```
{
```

```
prev->next = NULL;
```

```
}
```

```
free (temp);
```

```
}
```

```
void display (struct Node *head)
```

```
{
```

```
struct Node *temp = head;
```

```
while (temp->next != NULL)
```

```
{
```

```
printf ("%d\n", temp->data);
```

```
}
```

void main ()

{

struct Node * head = NULL;

insert At End (&head, 6);

insert At End (&head, 9);

insert At End (&head, 3);

insert At End (&head, 4);

insert At End (&head, 5);

display (head);

delete First (&head);

display (head);

delete CB (&head, 5);

display (head);

delete Last (&head);

display (head);

}