

Program 6 (Deletion _ Linked List)

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

```
struct node * head;
```

```
void del_at_first() {  
    if (head == NULL) {  
        printf("No elements present  
to delete\n");  
        return;  
    }  
    struct node * temp = head;  
    head = head -> next;  
    free(temp);  
    printf("Element deleted");  
}
```

```
void del_at_end() {  
    if (head == NULL) {  
        printf("No elements\n");  
        return;  
    }  
    if (head -> next == NULL) {  
        del_at_first();  
        return;  
    }  
}
```

```
struct node *temp = head;
while(temp->next->next != NULL) {
    temp = temp->next;
}
free(temp->next);
temp->next = NULL;
printf("Element at last deleted\n");
}
```

```
void del_at_anypos(int pos) {
    if(head == NULL) {
        printf("No elements present to delete");
        return;
    }
    if(pos == 1) {
        delete_at_first();
        return;
    }
    if(pos > length()) {
        delete_at_end();
        return;
    }
    struct node *prev = head;
    int jump = 1;
    while(jump < pos-1) {
        prev = prev->next;
        jump++;
    }
```

```
struct node * temp = prev->next;
prev->next = temp->next;
free(temp);
printf("Element at %d
       deleted\n", pos);
```

```
}
```