

~~queue~~

```
#include <stdio.h>
#include <stdlib.h>
Struct node
{
    int data;
    Struct node *next;
};

void insert();
void display();
void del();

Struct node *rear = 0; *front = NULL;

Int main()
{
    int choice;
    char ch = 'y';
    do
    {
        printf ("\n Queue Implementation using linked list\n");
        printf ("1. Create \n 2. Display \n 3. Delete \n 4. Exit\n");
        printf ("\nEnter your choice: ");
        scanf ("%d", &choice);

        switch (choice)
        {
            case 1: insert(); break;
            case 2: display(); break;
            case 3: del(); break;
            case 4: ch = 'n';
                      break;
        }
    } while (ch == 'y' || ch == 'Y');

}
```

```
Void insert() {  
    struct node * newnode;  
    newnode = (struct node *) malloc(sizeof(struct node));  
    printf("Enter the element : \n");  
    scanf("%d", &newnode->data);  
    newnode->next = 0;
```

```
if (rear == 0)  
    & rear = newnode;  
    front = newnode;  
}  
else  
    & rear->next = newnode;  
    front = newnode;  
}  
}
```

```
void del () {  
    if (front == 0)  
        & printf("Queue is Empty"); return;  
    & printf("Deleted Element is %d", front->data);  
    if (front == rear)  
        & printf("%d", temp->data);  
        temp = temp->next;  
    & printf("Queue is empty \n");  
    front = NULL;  
    rear = NULL;  
    else front = front->next; } }
```

```
void display () {
```

```
    struct node *temp;
```

```
    if (front == NULL)
```

```
    {
```

```
        printf ("Queue is empty");
```

```
        return;
```

```
}
```

```
    temp = front;
```

```
    while (temp != NULL)
```

```
{
```

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

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

```
}
```

```
}
```