

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
struct node
{
    int data;
    struct node *next;
};
struct node *head,*newnode,*temp;
void insertAtFirst()
{
    struct node *newnode;
    newnode=(struct node *) malloc(sizeof(struct node));
    printf("\nEnter data u want to insert at first:");
    scanf("%d",&newnode->data);
    newnode->next=head;
    head=newnode;
}
```

1:30

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9

```
[■] void insertAtLast()
{
    struct node *newnode;
    newnode=(struct node *) malloc(sizeof(struct node));
    printf("\nEnter data u want to insert at last:");
    scanf("%d",&newnode->data);
    newnode->next=NULL;
    temp=head;
    while(temp->next!=0)
    {
        temp=temp->next;
    }
    temp->next=newnode;
}

void insertAtPos()
{
    struct node *newnode;
    int i=1, pos;
    printf("\nEnter Position:");
}
```

38:30

1 Help

Alt-F8 Next Msg

Alt-F7 Prev Msg

Alt-F9 Compile F9 Ma

```
[■] void insertAtPos()
{
    struct node *newnode;
    int i=1, pos;
    printf("\nEnter Position:");
    scanf("%d", &pos);

    temp=head;
    while(i<pos-1)
    {
        temp=temp->next;
        i++;
    }
    newnode=(struct node *) malloc(sizeof(struct node));
    printf("\nEnter data u want to insert at position:");
    scanf("%d", &newnode->data);
    newnode->next=temp->next;
    temp->next=newnode;
```

52:30 F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile

```
[■]—————  
}  
void display(struct node *ptr)  
{  
  
    int count=0;  
    while(ptr!=0)  
    {  
        printf ("\nData : %d\n",ptr->data);  
        ptr=ptr->next;  
        count++;  
    }  
    printf ("\nCOUNT : %d",count);  
}  
void deletefrombeg()  
{  
    temp=head;  
    head=head->next;  
    free(temp);  
}
```

71:30

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9

```
DOUBLY86.C
SINGLY_5.C
}
free(temp);
}
void deletefrompos()
{
    struct node *nextnode;
    int pos,i=1;
    temp=head;
    printf("\nEnter Position:");
    scanf("%d",&pos);
    while(i<pos-1)
    {
        temp=temp->next;
        i++;
    }
    nextnode=temp->next;
    temp->next=nextnode->next;
    free(nextnode);
}
void deletefromend()
```

88:30 = 

**F1** Help **Alt-F8** Next Msg **Alt-F7** Prev Msg **Alt-F9** Compile **F9**

```
[■]=—————DOUBLY86.C—————  
void deletefromend()  
{  
    struct node *prevnode;  
    temp=head;  
    while(temp->next!=0)  
    {  
        prevnode=temp;  
        temp=temp->next;  
    }  
    if(temp==head)  
    {  
        head=0;  
    }  
    else  
    {  
        prevnode->next=0;  
    }  
    free(temp);  
}
```

106 :30 —————

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9

```
[■]—————  
void creat()  
{  
    int choice;  
    head=0;  
    while(choice)  
    {  
        newnode= (struct node *) malloc(sizeof(struct node));  
  
        printf("Enter data:");  
        scanf("%d",&newnode->data);  
        newnode->next=0;  
  
        if(head==0)  
        {  
            head=temp=newnode;  
        }  
        else  
        {  
            temp->next=newnode;  
        }  
    }  
}
```

125:30 —————

```
[■]=
else
{
    temp->next=newnode;
    temp=newnode;
}
printf("If you want to continue(0,1):");
scanf("%d",&choice);
}

void search()
{
int s,flag=0,count=1;
struct node *temp;
printf("\nEnter element u want to find:");
scanf("%d",&s);
temp=head;
while(temp!=0)
{
    if(temp->data==s)
        141:30 = ■
        flag=1;
    count++;
    temp=temp->next;
}
if(flag==0)
    printf("Element not found");
else
    printf("Element found at %d position",count);
}
```

```
[■]=
scanf ("%d", &s);
temp=head;
while(temp!=0)
{
    if (temp->data==s)
    {
        flag=1;           █
        break;
    }
    count++;
    temp=temp->next;
}
if (temp->data==s)
    printf ("\nElement found at pos %d",count);
if (flag==0)
    printf ("\n Element not found");
}
void sort()
{
```

155:30 = █

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9

```
[■]=
void sort()
{
    struct node *i,*j;
    int tmp;
    for(i=head; i->next!=NULL; i=i->next)
    {
        for(j=i->next; j!=NULL; j=j->next)
        {
            if(i->data > j->data)
            {
                tmp=i->data;
                i->data=j->data;
                j->data=tmp;
            }
        }
    }
    display(head);
}
void insertNode()
```

172:30

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile

```
[■]————— void insertNode()
{
    int ch1;
    printf("\n Insert node options\n");
    printf("\n 1: Insert at first position");
    printf("\n 2: Insert at last position");
    printf("\n 3: Insert after position");
    printf("\n Enter Your choice:");
    scanf("%d",&ch1);
    switch(ch1)
    {
        case 1:insertAtFirst();
        break;
        case 2:insertAtLast();
        break;
        case 3:insertAtPos();
        break;
    }
    display(head);
}
```

190:30

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10

```
[ ] ---jeet Up  
STACK.C ---  
DOUBLY86.C ---  
SINGLY_5.C ---  
}  
void deleteNode()  
{  
    int ch2;  
    printf("\n 1:Deletion at first node");  
    printf("\n 2:Deletion at last node");  
    printf("\n 3:Deletion at the position");  
    printf("\n Enter your Choice:");  
    scanf("%d",&ch2);  
    switch(ch2)  
    {  
        case 1: deletefrombeg();  
        break;  
        case 2: deletefromend();  
        break;  
        case 3: deletefrompos();  
        break;  
    }  
    display(head);
```

209:30

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9

```
[■]=—————  
}  
void main()  
{  
int n,ch;  
clrscr();  
while(1)  
{  
printf("\n 1:create the list");  
printf("\n 2:Insert a node in list");  
printf("\n 3:Display the list");  
printf("\n 4:Delete a node in the list");  
printf("\n 5:Search");  
printf("\n 6:Sorting");  
printf("\n 7:Exit");  
printf("\n Enter your choice:");  
scanf("%d",&ch);  
switch(ch)  
{  
case 1:create();  
228:30 =■=
```

```
[1] switch(ch)
{
    case 1:create();
    break;
    case 2:insertNode();
    break;
    case 3:display(head);
    break;
    case 4:deleteNode();
    break;
    case 5:search();
    break;
    case 6:sort();
    break;
    case 7: exit(0);
}
}
getch();
}
```

226:30

F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Ma