```
 #include <stdio.h>
#include <conio.h>
#include <alloc.h>
void create();
void insert();
void delet();
void display();
struct  node
{
int data;
struct node *link;
};
struct node *first=NULL,*last=NULL,*next,*prev,*cur;
void create()
{
  cur=(struct node*)malloc(sizeof(struct node));
  printf("\nENTER THE DATA: ");
  scanf("%d",&cur->data);
  cur->link=NULL;
  first=cur;
  last=cur;
}
void insert()
{
  int pos,c=1;
  cur=(struct node*)malloc(sizeof(struct node));
  printf("\nENTER THE DATA: ");
  scanf("%d",&cur->data);
  printf("\nENTER THE POSITION: ");
  scanf("%d",&pos);
  if((pos==1) &&(first!=NULL))
  {
   cur->link = first;
   first=cur;
  }
  else
  {
    next=first;
    while(c<pos)
    {
    prev=next;
    next=prev->link;
    c++;
    }
    if(prev==NULL)
    {
    printf("\nINVALID POSITION\n");
    }
    else
    {
    cur->link=prev->link;
    prev->link=cur;
    }
 }
}
void delet()
{
int pos,c=1;
printf("\nENTER THE POSITION : ");
scanf("%d",&pos);
if(first==NULL)
{
printf("\nLIST IS EMPTY\n");
}
else if(pos==1 && first->link==NULL)
{
printf("\n DELETED ELEMENT IS %d\n",first->data);
free(first);
first=NULL;
}
else if(pos==1 && first->link!=NULL)
{
cur=first;
first=first->link;
cur->link=NULL;
printf("\n DELETED ELEMENT IS %d\n",cur->data);
free(cur);
}
else
{
next=first;
while(c<pos)
{
cur=next;
next=next->link;
```

```
c++;
}
cur->link=next->link;
next->link=NULL;
if(next==NULL)
{
printf("\nINVALID POSITION\n");
}
else
{
printf("\n DELETED ELEMENT IS %d\n",next->data);
free(next);
}
}
}
void display()
{
  cur=first;
  while(cur!=NULL)
  {
    printf("\n %d",cur->data);
    cur=cur->link;
  }
}
void main()
{
int ch;
clrscr();
printf("\n\nSINGLY LINKED LIST");
do
{
printf("\n\n1.CREATE\n2.INSERT\n3.DELETE\n4.EXIT");
printf("\n\nENTER YOUR CHOICE : ");
scanf("%d",&ch);
switch(ch)
{
case 1:
        create();
        display();
        break;
case 2:
        insert();
        display();
        break;
case 3:
        delet();
        display();
        break;
case 4:
        exit(0);
default:
   printf("Invalid choice...");
}
}while(1);
}
```

```
-->>SAMPLE INPUT AND OUTPUT:

SINGLY LINKED LIST

1.CREATE
2.INSERT
3.DELETE
4.EXIT

ENTER YOUR CHOICE : 1

ENTER THE DATA: 10

 10

1.CREATE
2.INSERT
3.DELETE
4.EXIT

ENTER YOUR CHOICE : 2

ENTER THE DATA: 30

ENTER THE POSITION: 1

 30
 10
```

```
1.CREATE
2.INSERT
3.DELETE
4.EXIT

ENTER YOUR CHOICE : 3

ENTER THE POSITION : 2

LIST IS EMPTY
```