```
#include<stdio.h>
#include<conio.h>
#include<alloc.h>
#include<stdlib.h>
/* Node decleration */
struct node
{
int data;
struct node *link; //to maintain the link other nodes
};
struct node *top,*temp;

void create();
void push();
void pop();
void display();
/* create function create the head node */
void create()
{
printf("\nENTER THE FIRST ELEMENT: ");
top=(struct node *)malloc(sizeof(struct node));
scanf("%d",&top->data);
top->link=NULL;
temp=top;
}

/* display function visit the linked list from top to end */
void display()
{
top=temp;       // bring the top to top position
printf("\n");
while(top!=NULL)
{
printf("%d\n",top->data);
top=top->link;   // Now top points the previous node in the list
}
}
void push()
{
printf("\nENTER THE NEXT ELEMENT: ");
top=(struct node *)malloc(sizeof(struct node));
scanf("%d",&top->data);
```

```
top->link=temp;
temp=top;
}

void pop()
{
if(temp==NULL)
{
printf("\nSTACK IS EMPTY\n");
}
else
{
top=temp;
printf("\nDELETED ELEMENT IS %d\n",temp->data);
temp=temp->link;
free(top);
}
}
void main()
{
int ch;
clrscr();
while(1)
{
printf("\n\n 1.CREATE \n 2.PUSH \n 3.POP \n 4.EXIT \n");
printf("\n ENTER YOUR CHOICE : ");
scanf("%d",&ch);
switch(ch)
{
case 1:
        create();
        display();
        break;
case 2:
        push();
        display();
        break;
case 3:
        pop();
        display();
        break;
case 4:
        exit(0);
```

```
}
}
}
```

-->>SAMPLE INPUT AND OUTPUT:

```
  STACK
1.      CREATE
2.      PUSH
3.      POP
4.      EXIT
ENTER YOUR CHOICE : 1
ENTER THE FIRST ELEMENT : 10
10
  STACK
1.      CREATE
2.      PUSH
3.      POP
4.      EXIT
ENTER YOUR CHOICE: 2
ENTER THE NEXT ELEMENT: 30
10
30
STACK
1.      CREATE
2.      PUSH
3.      POP
4.      EXIT
ENTER YOUR CHOICE: 3
DELETED ELEMENT IS 30
STACK
1.      CREATE
2.      PUSH
3.      POP
4.      EXIT
ENTER YOUR CHOICE: 3
DELETED ELEMENT IS 10
STACK
1.      CREATE
2.      PUSH
3.      POP
4.      EXIT
```

```
ENTER YOUR CHOICE: 3
STACK IS EMPTY.
```