

```
/*INSERTION AND DELETION IN STACK USING LINKED LIST*/
```

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
void push();
```

```
void pop();
```

```
void display();
```

```
struct node
```

```
{
```

```
int data;
```

```
struct node *next;
```

```
}*top=NULL;
```

```
typedef struct node NODE;
```

```
NODE *p;
```

```
void main()
```

```
{
```

```
int ch;
```

```
clrscr();
```

```
printf("1.Push\n2.Pop\n3.Display\n4.Exit\n");
```

```
do
```

```
{
```

```
printf("\nEnter ur choice: ");
```

```
scanf("%d",&ch);
```

```
switch(ch)
```

```
{
```

```
case 1:push();break;
```

```
case 2:pop();break;

case 3:display();break;

case 4:printf("Program Exited");break;

default:printf("Invalid choice");

}

}while(ch!=4);

getch();

}

void push()

{

p=(NODE*)malloc(sizeof(NODE));

printf("Enter the data: ");

scanf("%d",&p->data);

if(top==NULL)

{

    p->next=NULL;

    top=p;

}

else

{

    p->next=top;

    top=p;

}

}

void pop()
```

```
{  
NODE *t;  
if(top==NULL)  
    printf("Stack Underflow");  
else  
    {  
        t=top;  
        top=top->next;  
        printf("Deleted element is %d.\n",t->data);  
        free(t);  
    }  
}  
void display()  
{  
NODE *i;  
if(top==NULL)  
    printf("Stack Underflow");  
for(i=top;i!=NULL;i=i->next)  
    printf("%d\t",i->data);  
getch();  
}
```