

```
/**** IMPLEMENTING STACK OPERATIONS USING LINKED LIST *****/
/***** SUBHAS NATH *****/
```

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
#define NULL 0

typedef struct list
{
    int data;
    struct list *next;
}node;

void main()
{
    node *push(node *);
    node *pop(node *);
    void display(node *);
    node *stack;
    int choice;
    char ch;
    stack=NULL;
    clrscr();
    while(1)
    {
        printf("\n\t1->PUSH");
        printf("\n\t2->POP");
        printf("\n\t3->DISPLAY");
        printf("\n\t4->EXIT");
        printf("\nEnter your choice");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:
                stack=push(stack);
                break;
            case 2:
                stack=pop(stack);
                break;
            case 3:
                display(stack);
                break;
            case 4:
                exit(0);
```

```

        default:
            printf("\nYour choice is invalid");

    }
}
getch();
}

```

```

node *push(node *s)
{
    node *temp;
    temp=(node *)malloc(sizeof(node));
    printf("\n Enter your data");
    scanf("%d",&temp->data);
    temp->next=s;
    s=temp;
    return(s);
}

```

```

node *pop(node *s)
{
    node *temp;
    int no;
    if(s==NULL)
        printf("\nStack is empty");
    else
    {
        temp=s;
        printf("\n%d if deleted",s->data);
        s=temp->next;
    }
    return(s);
}

```

```

void display(node *s)
{
    while(s!=NULL)
    {
        printf("\nstack->data=%d",s->data);
        s=s->next;
    }
    return;
}

```