```
#include<stdio.h>
#include<stdlib.h>
struct node
{
    int data;
    struct node *next;
};
struct node *top=NULL;
void push(void);
void pop(void);
void peek(void);
void display(void);
void main()
{
    int choice;
    while(1)
    {
        printf("1.Push\n");
        printf("2.Pop\n");
        printf("3.Peek\n");
        printf("4.Display\n");
        printf("5.Exit\n");
        printf("Enter your choice ");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1: push();
                    break;
            case 2: pop();
                    break;
            case 3: peek();
                    break;
            case 4: display();
                    break;
            case 5: exit(0);
            default: printf("Invalid Input\n");
        }
    }
}
void push()
{
    int info;
    struct node *newnode;
    newnode=(struct node *)malloc(sizeof(struct node));
    if(newnode==NULL)
    {
        printf("Malloc error\n");
        return;
    }
    printf("Enter your data ");
    scanf("%d",&info);
    newnode->data=info;
    newnode->next=top;
    if(top==NULL)
    {
        top=newnode;
    }
    else
```

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    {
        newnode->next=top;
        top=newnode;
    }
}
void pop()
{
    struct node *temp=top;
    if(temp==NULL)
    {
        printf("List is empty\n");
        return;
    }
    top=top->next;
    free(temp);
}
void peek()
{
    if(top==NULL)
    {
        printf("List is empty\n");
        return;
    }
    printf("%d\n",top->data);
}
void display()
{
    struct node *temp=top;
    if(temp==NULL)
    {
        printf("List is empty\n");
        return;
    }
    while(temp!=NULL)
    {
        printf("%d ",temp->data);
        temp=temp->next;
    }
    printf("\n");
}
```