```c
#include<stdio.h>
#include<stdlib.h>
int size;
int arr[25];
int top=-1;
int item;

void push();
int pop();
void display();

int main()
{
int item_del;
int ch;
printf("Enter size of stack\n");
scanf("%d",&size);
for(;;)
{
printf("\n1.Push\n2.Pop\n3.Display\n0.Exit\n");
fflush(stdin);
scanf("%d",&ch);
switch(ch)
{
case 1: push();
break;
case 2: item_del=pop();
if(item_del==-1)
printf("Stack is Empty\n");
else
printf("Item Deleted: %d\n",item_del);
break;
case 3: display();
break;
case 0: exit(0);
break;
default:printf("Invalid choice\n");
}
}
```

```c
36  default:printf("Invalid choice\n");
37  }
38  }
39  return 0;
40  }
41  void push()
42  {
43  if(top==size-1)
44  {
45  printf("Stack is filled\n");
46  return;
47  }
48  printf("Enter Item to be inserted in Stack\n");
    fflush(stdin);
49  scanf("%d",&item);
50  top++;
51  arr[top]=item;
52
53  }
54  int pop()
55  {
56  if(top==-1)
57  {
58  return -1;
59  }
60  else
61  {
62  return arr[top--];
63  }
64  }
65  void display()
66  {
67  int i;
68  if(top==-1)
69  {
70  printf("Stack is Empty\n");
71  }
72  else
73  for(i=0;i<=top;i++)
```

```c
51 arr[top]=item;
52
53 }
54 int pop()
55 {
56 if(top==-1)
57 {
58 return -1;
59 }
60 else
61 {
62 return arr[top--];
63 }
64 }
65 void display()
66 {
67 int i;
68 if(top==-1)
69 {
70 printf("Stack is Empty\n");
71 }
72 else
73 for(i=0;i<=top;i++)
74 {
75 printf("Element %d: %d\n",i+1,arr[i]);
76 }
77 }
78 |
```

```
Enter size of stack
5

1.Push
2.Pop
3.Display
0.Exit
1
Enter Item to be inserted in Stack
3

1.Push
2.Pop
3.Display
0.Exit
3
Element 1: 3

1.Push
2.Pop
3.Display
0.Exit
2
Item Deleted: 3

1.Push
2.Pop
3.Display
0.Exit
0

[Program finished]
```