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1  #include <stdio.h>
2  #include<stdlib.h>
3  #define size 3
4
5  int top = -1;
6  void push(int [],int);
7  int pop(int []);
8  void display(int []);
9
10 int main(int argc, char **argv)
11 {
12     int choice,element;
13     int stack[size];
14
15     while(choice !=4
16     )
17     {
18         printf("\nEnter your choice:\n1.Push\n2.Pop\n3.Display\n4.Exit\n");
19         scanf("%d",&choice);
20         switch(choice)
21         {
22             case 1:printf("Enter element to be pushed:");
23                     scanf("%d",&element);
24                     push(stack,element);
25                     break;
26             case 2:element = pop(stack);
27                     if(element == -1)
28                         printf("Stack overflow");
29                     else
30                         printf("Element popped is: %d",element);
31                     break;
32             case 3:display(stack);
33                     break;
34             case 4:exit(0);
35             default:exit(0);

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36         }
37     }
38
39     return 0;
40 }
41 void push(int stack[],int ele)
42 {
43     if(top == size-1)
44         printf("Stack overflow!");
45     else
46     {
47         top++;
48         stack[top] = ele;
49     }
50 }
51 int pop(int stack[])
52 {
53     int popele;
54     if(top == -1)
55         return -1;
56     else
57     {
58         popele = stack[top];
59         top--;
60         return popele;
61     }
62 }
63 void display(int stack[])
64 {
65     if(top == -1)
66         printf("Stack is empty");
67     else
68     {
69         for(int i=top;i>=0;i--)
70             printf("%d\t",stack[i]);

```