

(globals)

stack op.c

ses Debug

```
1  #include<stdio.h>
2  #define MAX 5
3  int stack[MAX];
4  int top=-1;
5  void push(int var)
6  {
7      if(top==MAX-1)
8      {
9          printf("Stack Overflow\n");
10     }
11     else
12     {
13         top=top+1;
14         stack[top]=var;
15         printf("%d is pushed.\n", var);
16     }
17 }
18 void pop()
19 {
20     if(top== -1)
21         printf("Stack underflow\n");
22     else
23     {
24         printf("%d popped from stack\n", stack[top]);
25         top=top-1;
26     }
27 }
28
29 void display()
30 {
31     if(top== -1)
32         printf("Stack is empty\n");
33     else
34     {
35         for(int i=top; i>=0; i--)
36             printf("%d ", stack[i]);
37         printf("\n");
38     }
39 }
```

```

0 int main() {
1     while(1)
2     {
3         int choice;
4
5         printf("\n--- Stack Menu ---\n");
6         printf("1. Push\n2. Pop\n3. Display\n4.Exit\n");
7         printf("Enter your choice: ");
8         scanf("%d", &choice);
9
10        switch(choice)
11        {
12            case 1:
13                printf("Enter value to be pushed");
14                int no;
15                scanf("%d",&no);
16                push(no);
17                break;
18            case 2:
19                pop();
20                break;
21            case 3:
22                display();
23                break;
24            case 4:
25                exit(0);
26                break;
27            default:
28                printf("Invalid choice! Try again.\n");
29
30        }
31    }
32 }

```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 1
Enter value to be pushed2
2 is pushed.

--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 1
Enter value to be pushed3
3 is pushed.

--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 1
Enter value to be pushed4
4 is pushed.

--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 1
Enter value to be pushed5
5 is pushed.

--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 1
Enter value to be pushed6
6 is pushed.

--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 1
Enter value to be pushed7
Stack Overflow
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 2
3 popped from stack
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 2
2 popped from stack
```

```
--- Stack Menu ---
1. Push
2. Pop
3. Display
4.Exit
Enter your choice: 2
Stack underflow
```