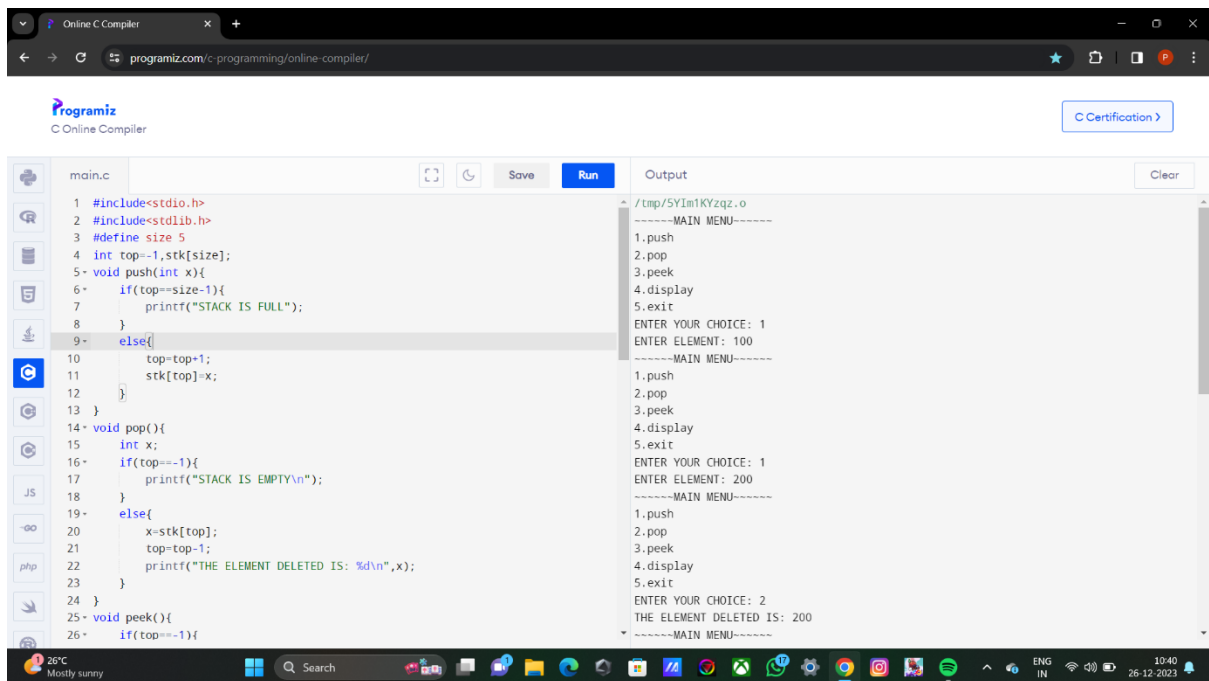


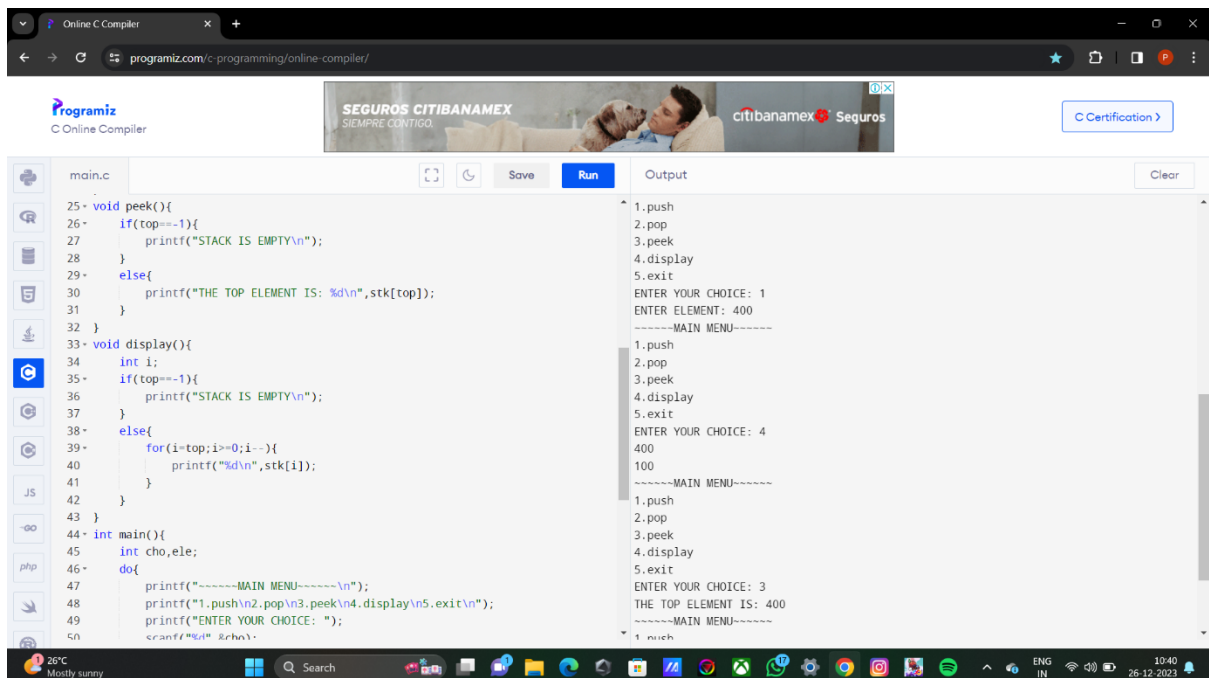
1. STACK FUNCTIONS IN A MENU DRIVEN PROGRAM.



```
1 #include<stdio.h>
2 #include<stdlib.h>
3 #define size 5
4 int top=-1,stk[size];
5 void push(int x){
6     if(top==size-1){
7         printf("STACK IS FULL");
8     }
9     else{
10         top=top+1;
11         stk[top]=x;
12     }
13 }
14 void pop(){
15     int x;
16     if(top-->=0){
17         printf("STACK IS EMPTY\n");
18     }
19     else{
20         x=stk[top];
21         top=top-1;
22         printf("THE ELEMENT DELETED IS: %d\n",x);
23     }
24 }
25 void peek(){
26     if(top==1){
```

Output

```
/tmp/SYIm1KYzqz.o
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 1
ENTER ELEMENT: 100
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 1
ENTER ELEMENT: 200
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 2
THE ELEMENT DELETED IS: 200
-----MAIN MENU-----
```



```
25 void peek(){
26     if(top==1){
27         printf("STACK IS EMPTY\n");
28     }
29     else{
30         printf("THE TOP ELEMENT IS: %d\n",stk[top]);
31     }
32 }
33 void display(){
34     int i;
35     if(top==1){
36         printf("STACK IS EMPTY\n");
37     }
38     else{
39         for(i=top;i>=0;i--){
40             printf("%d\n",stk[i]);
41         }
42     }
43 }
44 int main(){
45     int cho,e;
46     do{
47         printf("-----MAIN MENU-----\n");
48         printf("1.push\n2.pop\n3.peak\n4.display\n5.exit\n");
49         printf("ENTER YOUR CHOICE: ");
50         scanf("%d",&cho);
```

Output

```
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 1
ENTER ELEMENT: 400
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 4
400
100
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 3
THE TOP ELEMENT IS: 400
-----MAIN MENU-----
1.push
```

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C Certification

main.c

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```
do{
    printf("-----MAIN MENU-----\n");
    printf("1.push\n2.pop\n3.peak\n4.display\n5.exit\n");
    printf("ENTER YOUR CHOICE: ");
    scanf("%d",&cho);
    switch (cho){
        case 1:
            printf("ENTER ELEMENT: ");
            scanf("%d",&ele);
            push(ele);
            break;
        case 2:
            pop();
            break;
        case 3:
            peek();
            break;
        case 4:display();break;
        case 5:
            exit(0);
        default:
            printf("ENTER THE CHOICE BETWEEN 1 AND 5");
    }
}while(cho>=1&&cho<=5);
return 0;
}
```

Save

Run

Output

Clear

ENTER ELEMENT: 400
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 4
400
100
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 3
THE TOP ELEMENT IS: 400
-----MAIN MENU-----
1.push
2.pop
3.peak
4.display
5.exit
ENTER YOUR CHOICE: 5

26°C
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Search

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