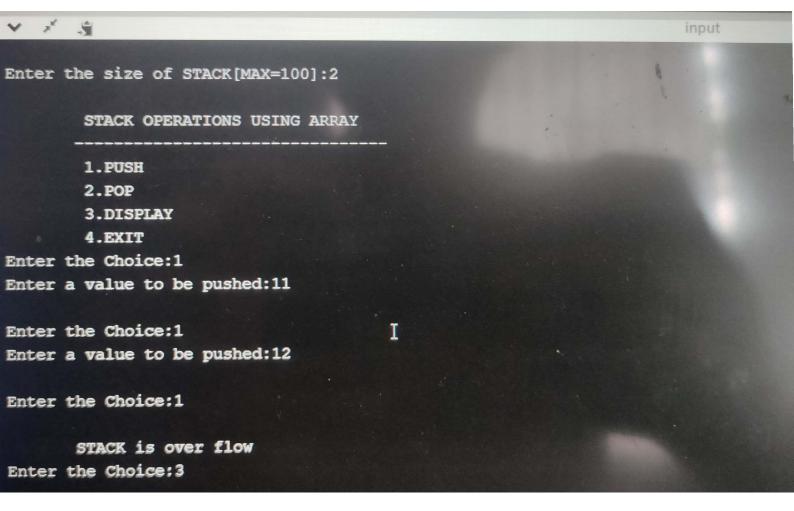
```
#include<stdio.h>
    int stack[100],choice,n,top,x,i;
     void push(void);
11
12
     void pop(void);
     void display(void);
                                                                               I
     int main()
14
           //clrscr();
17
           top=-1;
            printf("\n Enter the size of STACK[MAX=100]:");
scanf("%d",&n);
            printf( \n\t STACK OPERATIONS USING ARRAY");
printf("\n\t----");
printf("\n\t 1.PUSH\n\t 2.POP\n\t 3.DISPLAY\n\t 4.EXIT");
do
{
 19
 20
 21
  24
                  printf("\n Enter the Choice:");
scanf("%d", &choice);
switch(choice)
  26
  27
   28
   29
                        case 1:
   30
   31
                              push();
                              break;
    34
                         case 2:
```

```
34
                  case 2:
35
36
                       pop();
37
38
39
                  case 3:
40
41
                      display();
42
                      break;
43
44
                 case 4:
                                                       I
45
46
                      printf("\n\t EXIT POINT ");
47
                      break;
48
                   efault:
49
50
                     printf ("\n\t Please Enter a Valid Choice(1/2/3/4)");
51
52
53
54
55
        while(choice!=4);
56
        return 0;
57
58
   void push()
59
60
61
        if(top>=n-1)
            printf("\n\tSTACK is over flow");
63
64
```

```
61
62
63
          if(top>=n-1)
{
               printf("\n\tSTACK is over flow");
65
          }
else
{
66
               printf(" Enter a value to be pushed:");
scanf("%d",&x);
top++;
stack[top]=x;
69
70
73
74
75
     void pop()
          if(top<=-1)
78
               printf("\n\t Stack is under flow");
79
          }
else
80
               printf("\n\t The popped elements is %d",stack[top]);
84
     void display()
88
          if(top>=0)
```

```
73
74
    void pop()
          if(top<=-1)
78
               printf("\n\t Stack is under flow"); I
79
          }
else
80
81
82
               printf("\n\t The popped elements is %d",stack[top]);
83
84
85
     void display()
86
          if(top>=0)
88
 89
               printf("\n The elements in STACK \n");
 90
               for(i=top; i>=0; i--)
    printf("\n%d",stack[i]);
printf("\n Press Next Choice");
 91
 92
 93
 94
           }
else
 95
           1
 96
                printf("\n The STACK is empty");
100
```



```
Enter the Choice:1
 Enter a value to be pushed:12
 Enter the Choice:1
        STACK is over flow
 Enter the Choice:3
The elements in STACK
12
11
 Press Next Choice
 Enter the Choice:2
         The popped elements is 12
 Enter the Choice:2
         The popped elements is 11
  Enter the Choice:3
  The STACK is empty
  Enter the Choice: 3
```

```
Press Next Choice
Enter the Choice:2

The popped elements is 12
Enter the Choice:2

The popped elements is 11
Enter the Choice:3

The STACK is empty
Enter the Choice:3

The STACK is empty
Enter the Choice:4

EXIT POINT

Program finished with exit code 0

Press ENTER to exit console.
```