main.c

Run

Output

```c
1  #include <stdio.h>
2  int stack[100],i,j,choice=0,n,top=-1;
3  void push();
4  void pop();
5  void show();
6  void main ()
7 ▾ {
8
9      printf("Enter the number of elements in the stack ");
10     scanf("%d",&n);
11     printf("*********Stack operations using array*********");
12
13  printf("\n-------------------------------------------------\n");
14     while(choice != 4)
15 ▾  {
16         printf("Chose one from the below options...\n");
17         printf("\n1.Push\n2.Pop\n3.Show\n4.Exit");
18         printf("\n Enter your choice \n");
19         scanf("%d",&choice);
20         switch(choice)
21 ▾      {
22             case 1:
23 ▾          {
24                 push();
25                 break;
26             }
27             case 2:
28 ▾          {
29                 pop();
30                 break;
31             }
32             case 3:
33 ▾          {
34                 show();
35                 break;
36             }
```

or securepubads.g.doubleclick.net...

```
/tmp/8hI3qnMY3Q.o
Enter the number of elements in the stack 3
*********Stack operations using array*********
-----------------------------------------------
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?2
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?23
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?45
Chose one from the below options...
1.Push
2.Pop
3.Show
4.Exit
-
```

main.c

Run   Output

```
31          }
32              case 3:
33 ▾          {
34                  show();
35                  break;
36          }
37              case 4:
38 ▾          {
39                  printf("Exiting....");
40                  break;
41          }
42              default:
43 ▾          {
44                  printf("Please Enter valid choice ");
45          }
46          };
47      }
48  }
49
50  void push ()
51 ▾ {
52      int val;
53      if (top == n )
54      printf("\n Overflow");
55      else
56 ▾  {
57          printf("Enter the value?");
58          scanf("%d",&val);
59          top = top +1;
60          stack[top] = val;
61      }
62  }
63
64  void pop ()
65 ▾ {
66      if(top == -1)
```

```
1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?2
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?23
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?45
Chose one from the below options...
1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?12
Chose one from the below options...

▾ 1.Push
```

main.c   Run   Output

```c
46        };
47    }
48  }
49
50  void push ()
51  {
52      int val;
53      if (top == n )
54      printf("\n Overflow");
55      else
56      {
57          printf("Enter the value?");
58          scanf("%d",&val);
59          top = top +1;
60          stack[top] = val;
61      }
62  }
63
64  void pop ()
65  {
66      if(top == -1)
67      printf("Underflow");
68      else
69      top = top -1;
70  }
71  void show()
72  {
73      for (i=top;i>=0;i--)
74      {
75          printf("%d\n",stack[i]);
76      }
77      if(top == -1)
78      {
79          printf("Stack is empty");
80      }
81  }
```

```
1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?2
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?23
Chose one from the below options...

1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?45
Chose one from the below options...
1.Push
2.Pop
3.Show
4.Exit
 Enter your choice
1
Enter the value?12
Chose one from the below options...

1.Push
```