

main.c

```
1  #include<stdio.h>
2  #include<stdlib.h>
3  #include<conio.h>
4  #define stack_size 5
5  int top=-1;
6  int s[10];
7  int item;
8  void push()
9  {
10     if(top == stack_size - 1)
11     {
12         printf("Stack Overflow \n");
13         return;
14     }
15     top = top +1;
16     s[top] = item;
17 }
18 int pop()
19 {
20     if(top == - 1)
21         return - 1;
22     return s[top--];
23 }
24 void display()
25 {
26     int i;
27     if(top == - 1)
28     {
```

```
main.c
27 if(top == - 1)
28 {
29     printf("Stack is empty \n");
30     return;
31 }
32 printf("Contents of the stack are: \n");
33 for(i=top;i>=0;i--)
34 {
35     printf("%d \n", s[i]);
36 }
37 }
38 void main()
39 {
40     int item_deleted, choice;
41     for(;;)
42     {
43         printf("\n1:Push \n2:Pop \n3:Display \n4:Exit \n");
44         printf("Enter the choice : \n");
45         scanf("%d", &choice);
46         switch(choice)
47         {
48             case 1: printf("Enter the item to be inserted \n");
49                     scanf("%d", &item);
50                     push();
51                     break;
52             case 2: item_deleted = pop() ;
53                     if(item_deleted == - 1)
54                         printf("Stack is empty \n");
```

```
37 }
38 void main()
39 {
40     int item_deleted, choice;
41     for(;;)
42     {
43         printf("\n1:Push \n2:Pop \n3:Display \n4:Exit \n");
44         printf("Enter the choice : \n");
45         scanf("%d", &choice);
46         switch(choice)
47         {
48             case 1: printf("Enter the item to be inserted \n");
49                     scanf("%d", &item);
50                     push();
51                     break;
52             case 2: item_deleted = pop() ;
53                     if(item_deleted == - 1)
54                         printf("Stack is empty \n");
55                     else
56                         printf("Item deleted is %d \n", item_deleted);
57                     break;
58             case 3: display();
59                     break;
60             default:exit(0);
61         }
62     }
63     getch();
64 }
```

```
input
1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
10

1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
20

1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
30
```

input

```
1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
40
```

```
1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
50
```

```
1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
60
```



```
input
3:Display
4:Exit
Enter the choice :
1
Enter the item to be inserted
60
Stack Overflow

1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
3
Contents of the stack are:
50
40
30
20
10

1:Push
2:Pop
3:Display
4:Exit
Enter the choice :
```