

```

1  #include<stdio.h>
2  #include<stdlib.h>
3  #define SIZE 10
4
5  void push(int);
6  void pop();
7  void display();
8
9  int stack[SIZE],top=-1;
10
11 int main()
12 {
13     int n,choice;
14     while(1)
15     {
16         printf("\nMENU\n\n");
17         printf("(1)Push\n");
18         printf("(2)Pop\n");
19         printf("(3)Display\n");
20         printf("(4)Exit\n");
21         printf("Enter your choice: \n\n");
22         scanf("%d",&choice);
23
24         switch(choice)
25         {
26             case 1:
27                 printf("Enter the value to be inserted:");
28                 scanf("%d",&n);
29                 push(n);
30                 break;
31
32             case 2:
33                 pop();
34                 break;
35
36             case 3:
37                 display();
38                 break;
39
40             case 4:

```

```

        exit(0);
    }
    default: printf("Incorrect Selection.Select Again!\n\n");
}
return 0;
}

void push(int n)
{
    if(top==SIZE-1)
    {
        printf("Stack is Full.Insertion is not possible!\n\n");
    }
    else
    {
        top++;
        stack[top]=n;
        printf("Insertion Successful\n\n");
    }
}

void pop()
{
    if(top==-1)
    {
        printf("Stack is empty.Deletion is not possible!\n\n");
    }
    else
    {
        printf("Deleted: %d\n\n",stack[top]);
        top--;
    }
}

void display()
{
    if(top==-1)
    {
        printf("Stack is Empty\n\n");
    }
}

```

```
81     }
82     else
83     {
84         int i;
85         printf("Stack elements are: \n\n");
86         for(i=top;i>=0;i--)
87             printf("%d\n",stack[i]);
88     }
89 }
```