```
1: #include<stdio.h>
 2: #include<conio.h>
 3: #include<stdlib.h>
 4: #define MAXSIZE 10
 5:
 6: void push();
 7: void pop();
 8: void traverse();
 9: int stack[MAXSIZE], top = -1;
10:
11: void main()
12: {
13:
          int ch:
14:
          printf("\n**** Stack Operations ****");
15:
          printf("\n1. PUSH Operation");
16:
          printf("\n2. POP Operation");
17:
          printf("\n3. TRAVERSE Operation");
18:
          printf("\n4. Exit");
19:
20:
          while(1)
21:
22:
                 printf("\nEnter the choice: ");
23:
                 scanf("%d",&ch);
24:
25:
                 switch(ch)
26:
                 {
27:
                       case 1: push();
                                                       break;
                       case 2: pop();
28:
                                                       break;
29:
                       case 3: traverse();
                                                       break;
30:
                       case 4: exit(0);
                                                       break;
                       default: printf("\nWrong Input...!");
31:
32:
                 }
33:
34:
          getch();
35: }
36:
37: void push()
38: {
39:
          int item;
          if(top == (MAXSIZE - 1))
40:
41:
                 printf("\nStack is full...!");
42:
43:
          }
44:
          else
45:
          {
46:
                 printf("\nEnter the number: ");
```

```
scanf("%d",&item);
47:
48:
49:
                 top = top + 1;
                 stack[top] = item;
50:
51:
                 printf("\nInserted item is: %d",item);
52:
          }
53: }
54:
55: void pop()
56: {
57:
          int item;
          if(top == -1)
58:
59:
          {
                 printf("\nStack is empty...!");
60:
61:
          }
          else
62:
63:
          {
64:
                 item = stack[top];
65:
                 top = top - 1;
66:
                 printf("\nDeleted item is: %d",item);
          }
67:
68: }
69:
70: void traverse()
71: {
72:
         int i;
73:
         if(top == -1)
74:
                 printf("\nStack is empty...!");
75:
76:
         }
77:
         else
78:
         {
79:
                 printf("\nTraverse the elements\n");
                 for(i = top; i >= 0; i--)
80:
81:
                 {
                       printf("%d ",stack[i]);
82:
83:
                 }
84:
         }
85: }
```