```
#include<stdio.h>
 #include<comio.h>
 # define SIZE 7
 void push (int a);
void pop();
void display();
int stack[SIZE], top=-1;
void main()
3
     int x,n;
     while (1)
         printf("\nmenu .....");
         printf("\n 1.push\n 2.pop\n 3.display\n 4.exit");
         printf("\nenter your choice:");
         scanf ("%d", &n);
         if (n==1)
             printf("\nenter the element");
             scanf ("%d", &x);
             push (x);
         else if (n==2)
             pop();
         else if (n==3)
             display();
         else if (n==4)
             printf("\nexiting..");
             break;
         else
         printf("invalid entry..., please try again");
```

```
void push ( int m)
    if(top==SIZE-1)
    printf("stack is full,. you cannot add an element");
    else
        stack[++top]=m;
        printf("inserted successfully");
void pop()
   if(top==-1)
    printf("stack is empty. you cannot insert an element");
    else
   {int c;
    c=stack[top--];
    printf ("deleted elemnt is %d",c);
void display()
   if(top==-1)
    printf("stack underflow");
   else(
        int i;
        printf("stack elements are: ");
        for (i=top; i>=0; i--)
        printf("%d ", stack[i]);
```

```
menu .....
 1.push
2.pop
3.display
4.exit
enter your choice:1
enter the element6
inserted successfully
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:1
enter the element4
inserted successfully
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:2
deleted elemnt is 4
menu .....
 1.push
2.pop
3.display
4.exit
enter your choice:3
stack elements are: 6
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:2
deleted elemnt is 6
menu .....
 1. push
 2.pop
3.display
 4.exit
enter your choice:3
stack underflow
```

```
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:3
stack elements are: 6
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:2
deleted elemnt is 6
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:3
stack underflow
menu .....
1.push
2.pop
3.display
4.exit
enter your choice:4
exiting..
Process returned 10 (0xA) execution time : 20.261 s
Press any key to continue.
```