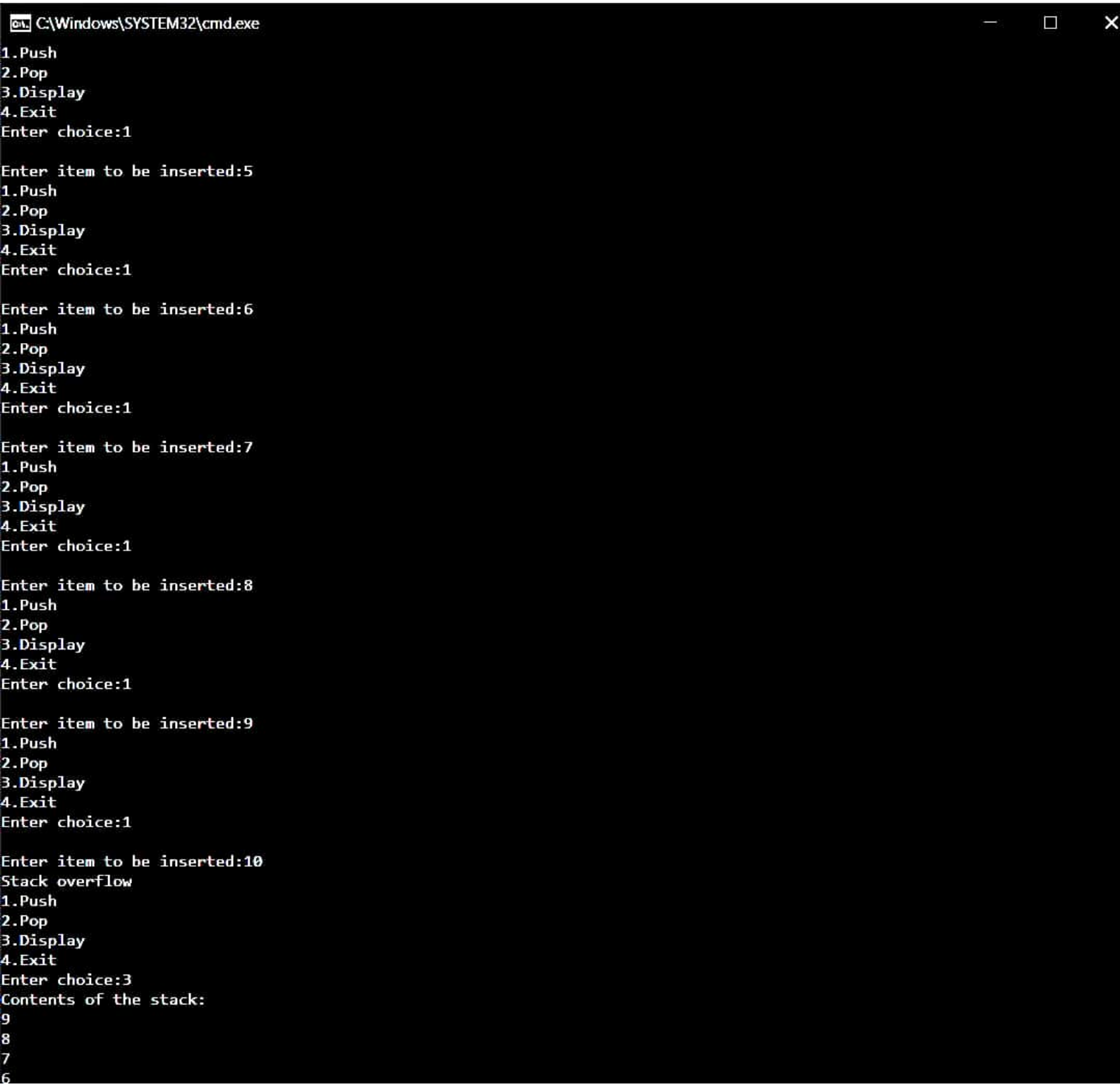
```c
#include <stdio.h>
#include <process.h>
#include <conio.h>
#define stack_size 5
int top=-1;
int s[10];
int item;
void push() {
    if(top==stack_size-1) {
        printf("Stack overflow\n");
        return;
        }
    top=top+1;
    s[top]=item;
    }
int pop() {
    if(top==-1)
        return -1;
    return s[top--];
}
void display() {
    int i;
    if(top==-1) {
        printf("Stack is empty\n");
        return;
    }
    printf("Contents of the stack:\n");
    for(i=top;i>=0;i--)
        printf("%d\n",s[i]);
}
int main() {
    int item_deleted;
    int ch;
    for(;;) {
        printf("\n1.Push\n2.Pop\n3.Display\n4.Exit");
        printf("\nEnter choice:");
        scanf("%d",&ch);
        switch(ch) {
            case 1:
                printf("\nEnter item to be inserted:");
                scanf("%d",&item);
                push();
                break;
            case 2:
                item_deleted=pop();
                if(item_deleted==-1)
                    printf("\nStack is empty\n");
                else
                    printf("item deleted is %d\n",item_deleted);
                break;
            case 3:
                display();
                break;
            default:
                exit(0);
        }
    }
    return 0;
```



```
6
5
1.Push
2.Pop
3.Display
4.Exit
Enter choice:2
item deleted is 9
1.Push
2.Pop
3.Display
4.Exit
Enter choice:2
item deleted is 8
1.Push
2.Pop
3.Display
4.Exit
Enter choice:2
item deleted is 7
1.Push
2.Pop
3.Display
4.Exit
Enter choice:2
item deleted is 6
1.Push
2.Pop
3.Display
4.Exit
Enter choice:2
item deleted is 5
1.Push
2.Pop
3.Display
4.Exit
Enter choice:2

Stack Underflow
1.Push
2.Pop
3.Display
4.Exit
Enter choice:3
Stack is empty
1.Push
2.Pop
3.Display
4.Exit
Enter choice:
```