main.c

```c
#include<stdio.h>
#include<stdlib.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");
   }
   printf("\nContents of Stack  are : \n");
   for(int i=top;i>=0;i--){
     printf("%d\n",s[i]);
   }
}
```

main.c

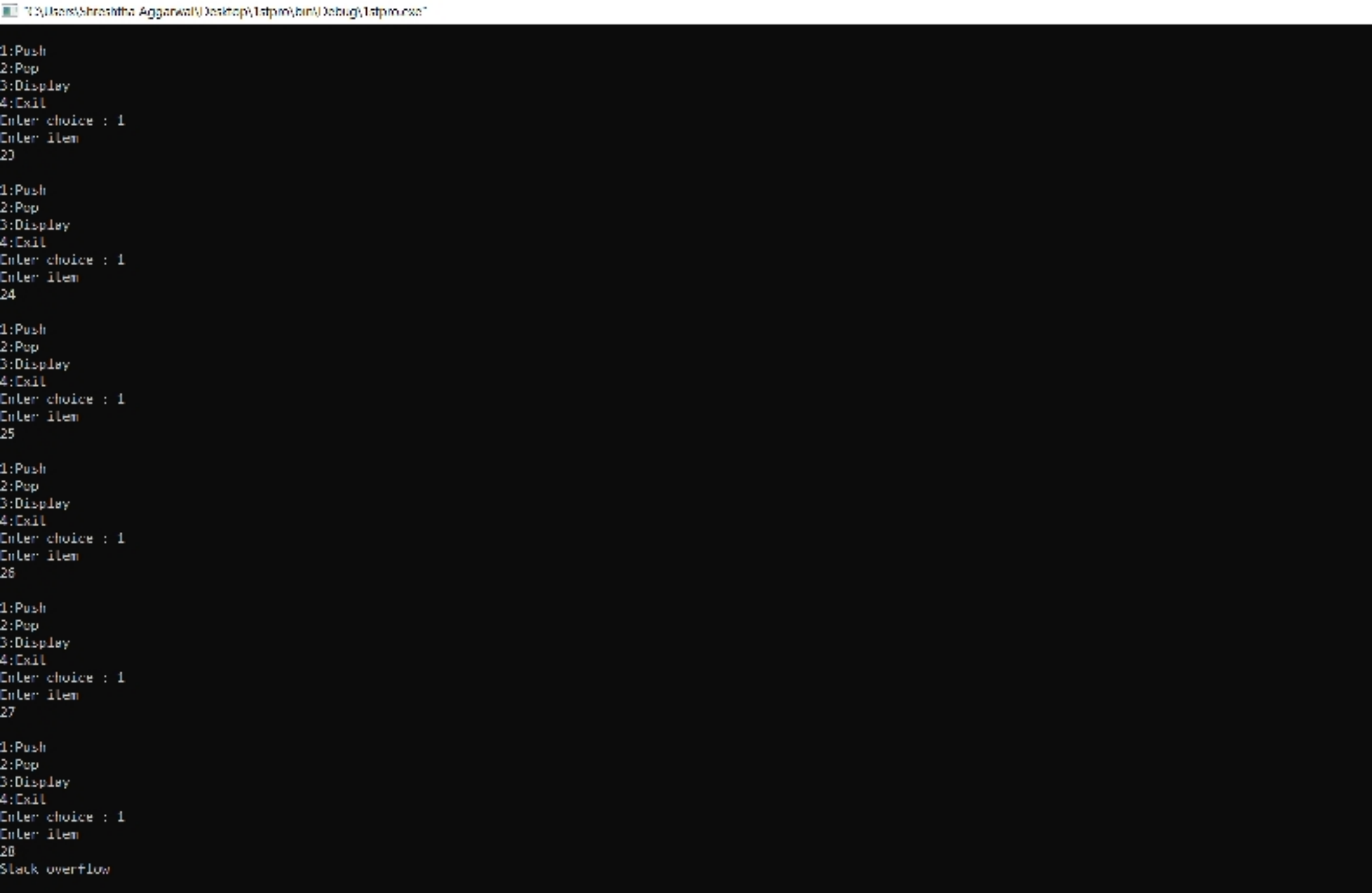
```c
void main()
{
    int item_deleted,choice;
    for(;;){
        printf("\n1:Push\n2:Pop\n3:Display\n4:Exit\n");
        printf("Enter choice : ");
        scanf("%d",&choice);
        switch(choice){
            case 1: printf("Enter item\n");
                scanf("%d",&item);
                push();
                break;

            case 2: item_deleted=pop();
                if(item_deleted==-1){
                    printf("Stack underflow, so no maore items can be deleted\n");
                }
                else{
                    printf("Item deleted: %d\n",item_deleted);
                }
                break;

            case 3: display();
                break;

            case 4: exit(0);

            default: printf("Enter proper instructional value\n");
                break;
        }
    }
    getch();
}
```


"C:\Users\Shraddha Aggarwal\Desktop\Infpro\bin\Debug\Infpro.exe"
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 1
Enter item
23
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 1
Enter item
24
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 1
Enter item
25
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 1
Enter item
26
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 1
Enter item
27
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 1
Enter item
28
Stack overflow

"C:\Users\Shreshtha Aggarwal\Desktop\1stpro\bin\Debug\1stpro.exe"

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

Contents of Stack  are :
27
26
25
24
23

1:Push
2:Pop
3:Display
4:Exit
Enter choice : 2
Item deleted: 27

1:Push
2:Pop
3:Display
4:Exit
Enter choice : 2
Item deleted: 26

1:Push
2:Pop
3:Display
4:Exit
Enter choice : 2
Item deleted: 25

1:Push
2:Pop
3:Display
4:Exit
Enter choice : 2
Item deleted: 24

1:Push
2:Pop
3:Display
4:Exit
Enter choice : 2
Item deleted: 23
```

"C:\Users\Shreshtha Aggarwal\Desktop\1stpro\bin\Debug\1stpro.exe"

```
1:Push
2:Pop
3:Display
4:Exit
Enter choice : 2
Stack underflow, so no maore items can be deleted

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

Contents of Stack  are :

1:Push
2:Pop
3:Display
4:Exit
Enter choice : 67
Enter proper instructional value

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

Process returned 0 (0x0)   execution time : 86.497 s
Press any key to continue.
```