

Stack Mechanism Discussion with Time Complexity

8. Exit

```
case 7:  
    exit(0);  
    break;
```

exit(0) , where 0 refers successful exit from the program.

It takes constant time `c` to exit from the program i.e. O(1).

But does it empty the stack frame of the main function?

After the exit(0) is called,

The Operating System destroys the entire process memory.

That includes:

- ***Stack segment***
- ***Heap segment***
- ***Global/static memory***
- ***Code segment***

Everything is removed at once.

Entire process is killed immediately.

No manual stack frame popping.

Hence , now our contiguous memory is freed.

