

```
1
2  #include "main.hpp"
3
4  Elevator::Elevator()
5  : mState{ ES_WAIT }, mStop{ false } {
6      mThread = std::thread{&start, this};
7  }
8
9  Elevator::~Elevator() {
10     mThread.join();
11 }
12
13 void Elevator::start() {
14     while (!gStart) // Wait for all go signal
15         ;
16
17     while (!gStop) {
18         if (mStop) { // Controller wants us to stop at this foor
19             mDoor.start();
20         }
21
22         if (mState == ES_UP) {
23             inc(mFloor); // to lazy to change it back to ++/--
24
25             std::this_thread::sleep_for(5s);
26             continue;
27         }
28
29         if (mState == ES_DOWN) {
30             dec(mFloor);
31
32             std::this_thread::sleep_for(5s);
33             continue;
34         }
35     }
36
37     std::cout << "Elevator exiting" << std::endl;
38 }
39
40 void Elevator::reset(FloorNum flr) {
41     mState = ES_WAIT;
42     mFloor = flr;
43 }
```