```
2
    #include <mutex>
 3
 4
     #include "main.hpp"
 5
 6
    // deprecated cant use [[depreciated]]
 7
    void Memory::clearMem() {
8
        std::lock guard<std::mutex> { mGuard };
9
10
        // https://stackoverflow.com/guestions/709146
11
        decltype (mFloors) empty; // swap with an empty one
12
        std::swap(mFloors, empty);
13
    }
14
15
    bool Memory::isEmpty() {
16
        return mFloors.empty();
17
18
19  void Memory::setFloor(FloorNum flr) {
20
        if (FireKey) {
21
            mFireFloor = flr;
22
            return;
23
        }
24
25
        std::lock guard<std::mutex> { mGuard }; // Protection
26
        mFloors.push(flr);
27
    }
28
29
   FloorNum Memory::getFloor() {
30
        if (FireKey) // no need for protection
31
            return mFireFloor;
32
33
        std::lock guard<std::mutex> { mGuard };
34
35
        if (mFloors.empty())
36
            return getDefaultFloor();
37
38
        auto flr = mFloors.front();
39
        mFloors.pop();
40
        return flr;
41
    }
42
43
44 FloorNum Memory::getDefaultFloor() {
45
        // return F1; /// FOR TESTING PURPOSES ONLY
46
        auto hour = gClk.getHour();
47
48
        // std::cout << "....." << std::to string(hour)
        << std::endl;
49
50
        if (hour > 8 and hour < 14)
51
            return F1;
52
53
        if (hour >= 14 and hour < 18)
54
            return F2;
55
56
        return F1;
57
     }
```