Lab #8 ① Expo questions & get turned in during lab ② RPS Game ③ testing

* I will update test scores

CS 162
Intro to CS II

Intro to C Programming

* Mecap, selection event Wed 20th — NO office hours

Assignment #4

- Get into groups of 4-5.
- How will you fill the vector of vectors?
- How will you know if you have visited all cells in the floor plan?

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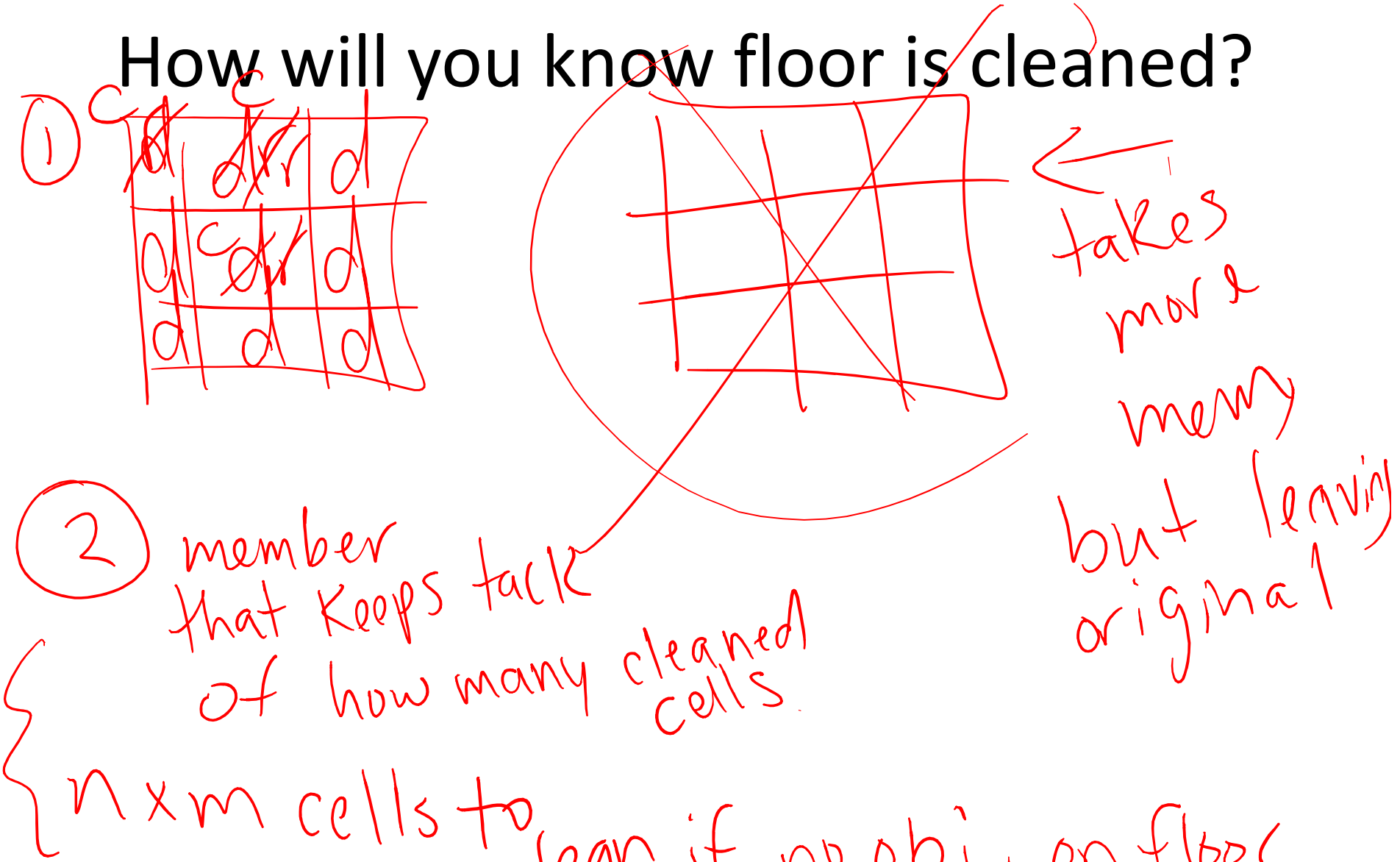
```
 1 #include <vector>
 2 #include <iostream>
 3
 4 using namespace std;
 5
 6 int main() {
 7     vector <vector<char> > v;
 8     vector <char> temp;
 9
10     temp.push_back('d');
11     temp.push_back('d');
12     temp.push_back('d');
13     temp.push_back('d');
14     v.push_back(temp);
15     temp.clear();
16
17     temp.push_back('d');
18     temp.push_back('d');
19     temp.push_back('d');
20     temp.push_back('d');
21     v.push_back(temp);
22     temp.clear();
23
24     cout << "rows: " << v.size() << endl;
25     cout << "cols: " << v[0].size() << endl;
26
"vector.cpp" 28L, 500C                                25,4          Top
```

How will you know floor is cleaned?



C/C++ Differences

- Biggest???
- Semantics
  - Only one meaning of & (address of)
- Syntax
  - Libraries (.h)
  - Location of variable declaration (-std=c89 -pedantic)
  - Input/Output (scanf()/printf())
  - Structs
  - Dynamic Memory (malloc()/free())
  - File I/O (file pointer)

C vs. C++ Libraries, variables, and input

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```
 1 #include <iostream>
 2 using namespace std;
 3
 4 int main(){
 5     int num;
 6
 7     cin >> num;
 8     cout << "the " << num << " num is: " << num << endl;
 9
10     return 0;
11 }
~
"c++.cpp" 11L, 157C written                   11,1          All
```

```
 1 #include <stdio.h>
 2
 3 int main() {
 4
 5     int num;
 6
 7     scanf("%d", &num);
 8     printf("the %d num is: %d\n", num, num);
 9
10     return 0;
11 }
~
"c.c" 12L, 154C                               9,0-1         All
```