

LeetCode 71

Description

Given an absolute path for a file (Unix-style), simplify it.

For example,

path = "/home/", => "/home"

path = "/a/./b/../../c/", => "/c"

Thought

Analyse the examples to find the problem can turn into a problem using stack.

Solution

```
public String simplifyPath(String path) {  
    Deque<String> stack = new LinkedList<>();  
    Set<String> skip = new HashSet<>(Arrays.asList("../", ".", ""));  
    for (String dir : path.split("/")) {  
        if (dir.equals("../") && !stack.isEmpty()) stack.pop();  
        else if (!skip.contains(dir)) stack.push(dir);  
    }  
    String res = "";  
    for (String dir : stack) res = "/" + dir + res;  
    return res.isEmpty() ? "/" : res;  
}
```

Takeaways

- Turn non-programing problem into a programing problem