

# **Lecture 1 - Monday, January 9**

## Lecture

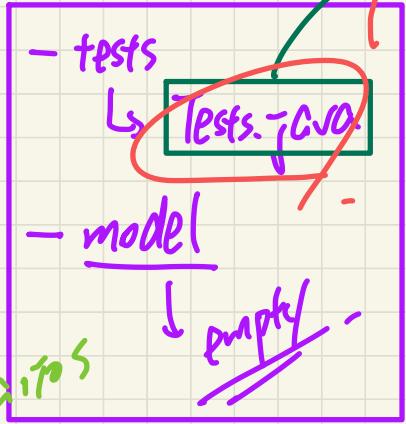
# Solving Problems via Data Structures

*Searching*

## Assignments / Projects

Starter project

only supply example scenarios  
(potentially incomplete)  
↳ you are



expected to:  
1) do not hard-code your methods "just for the given tests"  
2) write additional JUnit tests to cover missing scenarios.

When grading your PT submissions:

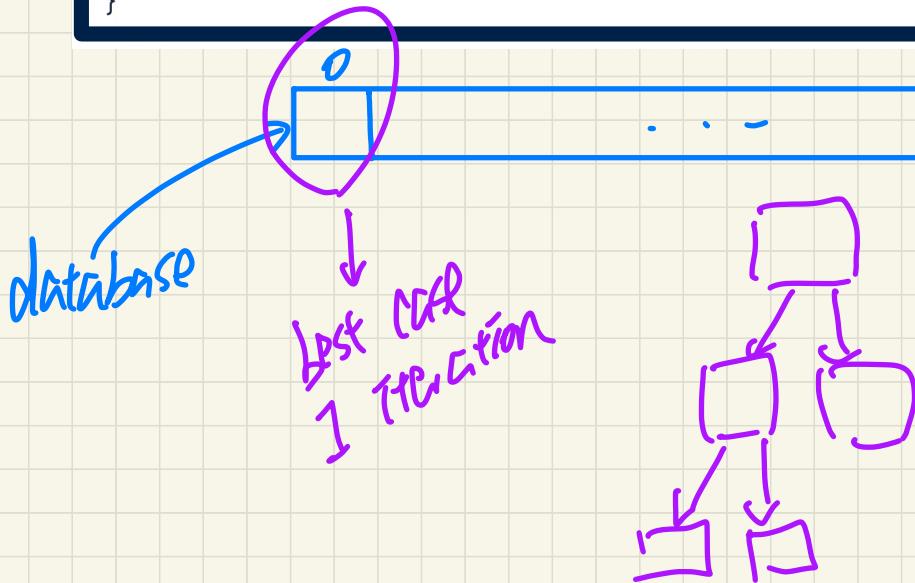
- 1) compilation
- 2) passing starter tests
- 3) additional grading tests

give you some initial idea about how methods should be:

- (1) declared
- (2) implemented

# A Searching Problem

```
ResidentRecord find(int sin) {  
    for(int i = 0; i < database.length; i++) {  
        if(database[i].sin == sin) {  
            return database[i];  
        }  
    }  
}
```



# Efficient Solution

balanced binary search tree

