Leaderboard

# Day 8: Dictionaries and Maps ☆

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# Objective

**Problem** 

Today, we're learning about Key-Value pair mappings using a Map or Dictionary data structure. Check out the Tutorial tab for learning materials and an instructional video!

## Task

Given *n* names and phone numbers, assemble a phone book that maps friends' names to their respective phone numbers. You will then be given an unknown number of names to query your phone book for. For each *name* queried, print the associated entry from your phone book on a new line in the form name=phoneNumber; if an entry for *name* is not found, print Not found instead.

**Note:** Your phone book should be a Dictionary/Map/HashMap data structure.

# **Input Format**

The first line contains an integer, n, denoting the number of entries in the phone book.

Each of the n subsequent lines describes an entry in the form of 2 space-separated values on a single line. The first value is a friend's name, and the second value is an 8-digit phone number.

After the n lines of phone book entries, there are an unknown number of lines of queries. Each line (query) contains a name to look up, and you must continue reading lines until there is no more input.

**Note:** Names consist of lowercase English alphabetic letters and are first names only.

#### **Constraints**

- $1 \le n \le 10^5$
- $1 \le queries \le 10^5$

### **Output Format**

On a new line for each query, print Not found if the name has no corresponding entry in the phone book; otherwise, print the full name and phoneNumber in the format name=phoneNumber.

#### Sample Input

Editorial 🖰	Tutorial
Author	Shafaet
Difficulty	Easy
Max Score	30
Submitted By	158155

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```
sam 99912222
   tom 11122222
   harry 12299933
   sam
   edward
   harry
Sample Output
   sam=99912222
   Not found
   harry=12299933
Explanation
We add the following n=3 (Key,Value) pairs to our map so it looks like this:
phoneBook = \{(sam, 99912222), (tom, 11122222), (harry, 12299933)\}
We then process each query and print key=value if the queried key is found in the
map; otherwise, we print Not found.
Query 0: sam
Sam is one of the keys in our dictionary, so we print sam=99912222.
```

Edward is not one of the keys in our dictionary, so we print Not found.

Harry is one of the keys in our dictionary, so we print harry=12299933.

Query 1: edward

Query 2: harry

```
Change Theme
                         Java 8
     //Complete this code or write your own from scratch
     import java.util.*;
     import java.io.*;
 4
 5 □ class Solution{
         public static void main(String []argh){
 6 E
             Scanner in = new Scanner(System.in);
             int n = in.nextInt();
             for(int i = 0; i < n; i++){
 9 \Box
                  String name = in.next();
10
                  int phone = in.nextInt();
11
                  // Write code here
12
13 <sub>=</sub>
             while(in.hasNext()){
```

```
15
                     String s = in.next();
                     // Write code here
  16
  17
                }
                in.close();
  18
           }
  19
       }
  20
  21
  22
                                                     Line: 22 Col: 1
 ↑ Upload Code as File
                                                     Submit Code
                                      Run Code
Test against custom input
```

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