Due on 2020-04-08, 23:59 IST

Write a program that reads an integer n, and then n pairs of names, and finally two additional names S, B. Each name is a sequence of non whitespace characters delimited by whitespace.

In each pair the first name is the name of an employee and the second name is the name of the boss of the employee. Assume that each employee has at most one boss.

Say that an employee E is "above" an employee F if E is the boss of F, or E is the boss of the boss of F, or the boss of the boss of the boss of F, and so on.

Your program is to print 1 if employee B is above employee S and 0 otherwise.

Hint: use a map to store the boss of each employee if known.

Sample Test Cases

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lecture 22: Representing variable length entities: Part 1
: Introduction (unit? unit=95&lesson=133)

Test Case 1
5
Bruce
Tony
Peter
Bruce
Stephen
Peter
Clark
Bruce
Diana
Bruce
Stephen
Tony

Test Case 2
11
Pushpak
Director
Kevin
Rudra
Dillip
Abhiram
Vijay
Bharti
Castiel
Diptesh
Bharti
Abhiram
Rudra
Pushpak
Diptesh
Kevin
Abhiram
Director
Tom
Director
Jince
Tom
Diptesh
Abhiram

Test Case 3
5
a b
b c
c d
p q
q r
a r

https://onlinecourses.nptel.ac.in/noc20_cs53/progassignment?name=224
entities: Part 7
: Using the implemented class and conclusion (unit?
unit=95&lesson=139)

Lecture 23 : The Standard Library: Part 1 : Class string (unit?
unit=95&lesson=140)

Lecture 23 : The Standard Library: Part 2 : Class vector (unit?
unit=95&lesson=141)

Lecture 23 : The Standard Library: Part 3 : Sorting vectors and arrays (unit?
unit=95&lesson=142)

Lecture 23 : The Standard Library: Part 4 : Classes map and unordered_map (unit?
unit=95&lesson=143)

Lecture 23 : The Standard Library: Part 5 : Iterators (unit?
unit=95&lesson=144)

Download Videos (unit?
unit=95&lesson=186)

Weekly Feedback (unit?
unit=95&lesson=198)

Quiz : Week 10 Assignment (assessment?name=222)

Week 10 Programming Assignment 1

Test Case 4

3
Michael
God
Gabriel
God
Lucifer
God
Gabriel
God

Test Case 5

5
Bruce
Tony
Peter
Bruce
Stephen
Peter
Clark
Bruce
Diana
Bruce
Tony
Stephen

Test Case 6

4
Castiel
Diptesh
Diptesh
Kevin
Kevin
Rudra
Rudra
Pushpak
Castiel
Pushpak

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.
Sample solutions (Provided by instructor)

#include <iostream>
define repeat(x) for(int _iterator_i = 0, _iterator_limit = x; _iterator_i
#define main_program int main()
#include <cmath>
using namespace std;
#define repeat for(int _iterator_i = 0, _iterator_limit = x; _iterator_i
#include <map>
int main(){
map<string,string> boss;
int n; cin >> n;
repeat(n){
  string s,b; cin >> s >> b;
  boss[s] = b;
}
string S,B; cin >> S >> B;
while(true){
  if(B == S){

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cout << 1 << endl;
break;
}
if(boss.count(S) == 0){
cout << 0 << endl;
break;
} $
S = boss[S]$;