

Data Structure

Lab 7.Tree

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Lab 7 - Submission & Evaluation

2

- Submission deadline: 4 PM, June 2 (Tue)
- Submission via **Hisnet** (“Lab 7”)
- Evaluation: 5 points
 - 5 points per problem: succeed on time
 - No late submission is allowed

Lab 6.
Sorting

Data Structure

2020-05-29

Academic Family Tree

3

- Academic genealogy is represented as a family tree where X becomes the parent of Y if X advises Y in Y 's doctoral degree.
 - Assume that each person has at most one advisor (i.e., parent)
- Write a program that receives advisor-advisee relation and then prints the academic family tree (see the example below)
- Reuse the left child-right sibling tree example to construct a tree holding string items
 - <https://github.com/hongshin/DataStructure/tree/tree/tree/lcrb>

```
10 8
Park Kim
Park Lee
Hwang Park
Lee Woo
Lee Nam
Hwang Choi
Choi Hong
Koh Wang
```

<Input>

```
Hwang
+--Park
    +--Kim
    +--Lee
        +--Woo
        +--Nam
+--Choi
    +--Hong
Koh
+--Wang
```

<Output>

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Data Structure

2020-05-29

Input and Output

4

- Input

- First line has two numbers N and M ($0 < N \leq 100$, $0 < M \leq 10000$), where N represents the number of scholars and M represents the number of advise relations.
- From second line, each line has X and Y where X is the advisor and Y is the advisee. The name of a scholar is a string without a blank. The length of a name is always less than 64.

- Output

- An advisor must be printed earlier than an advisee.
- The indentation of an advisee must be one level higher than its advisor
- The indentation should be decorated as given in the example