

Code exercise 106

BIG COMPANY is employing a lot of employees. Company would like to analyze its organizational structure and identify potential improvements. Board wants to make sure that every manager earns at least 20% more than the average salary of its direct subordinates, but no more than 50% more than that average. Company wants to avoid too long reporting lines, therefore we would like to identify all employees which have more than 4 managers between them and the CEO.

You are given a CSV file which contains information about all the employees. File structure looks like this:

```
Id,firstName,lastName,salary,managerId
123,Joe,Doe,60000,
124,Martin,Chekov,45000,123
125,Bob,Ronstad,47000,123
300,Alice,Hasacat,50000,124
305,Brett,Hardleaf,34000,300
```

Each line represents an employee (CEO included). CEO has no manager specified. Number of rows can be up to 1000.

Write a simple program which will read the file and report:

- which managers earn less than they should, and by how much
- which managers earn more than they should, and by how much
- which employees have a reporting line which is too long, and by how much

Key points:

- use only Java SE (any version), and Junit (any version) for tests.
- use maven for project structure and build
- your application should read data from a file and print out output to console. No GUIs needed.
- code will be assessed on correctness, simplicity, readability and cleanliness
- If you have any doubts make a sensible assumption and document it

When you're ready with your assignment please send us link to an online code repository (github, bitbucket, etc.) so we can review your code.