VIMOND

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Engineering Assignment: Java, Node, Go

The current exercise aims to evaluate your knowledge of one of our preferred backend languages. Qualifications you may have or will develop are:

- Java, Node or Go
- Knowledge of git
- Familiarity with continuous integration

Write a program that takes two inputs from the command line or a web-service that offers an endpoint taking the following input:

- a set of include intervals
- a set of exclude intervals

The sets of intervals can be given in any order, and they may be empty or overlapping. The program should output the result of taking all the includes and "remove" the excludes. The output should be given as non overlapping intervals in a sorted order. The intervals contain integers only.

Example 1:

Includes: `10-100`
Excludes: `20-30`
Output should be: `10-19, 31-100`

Example 2:

Includes: `50-5000, 10-100`
Excludes: *(none)*
Output: `10-5000`

Includes: `200-300, 50-150`
Excludes: `95-205`
Output: `50-94, 206-300`

Includes: `200-300, 10-100, 400-500`
Excludes: `410-420, 95-205, 100-150`
Output: `10-94, 206-300, 400-409, 421-500`

The things we will look for in the evaluation of this test are:

- Does the program work as described in the specification? Is it bugfree?
- The overall design of your solution
- Is the code easy to read and maintain?
- What is the complexity of your algorithm? (BigO notation)
- Is the code documented and ready for production?

The case can be delivered via your GitHub account or other source control repository, or as a compressed archive sent through e-mail.

While you have 4 days for assignment, from the feedback we have received it should take between 8 to 12 hours for this task.