

# Similarity Exercise

## Overview

Use a programming language of your choice to implement a data analysis algorithm.

We realize that doing this assignment may require you to learn new technologies. A lot of what our team does on a daily basis involves learning new technologies, concepts and techniques and applying them to our product. This assignment is designed to demonstrate that you can write code that performs analysis on a well defined set of data. Do your best and don't give up.

## Assignment

- Read and understand the CIDR notation - [http://en.wikipedia.org/wiki/Classless\\_Inter-Domain\\_Routing#CIDR\\_notation](http://en.wikipedia.org/wiki/Classless_Inter-Domain_Routing#CIDR_notation)
- Assume you're given n sets of CIDR blocks. For example {10.10.0.0/16, 10.20.0.0/16, 192.168.5.0/24} and {10.0.0.0/8, 192.168.5.127/25}.
- Return a matrix, which indicates the degree of interaction between the sets, for example the first two in the first block, are contained within the first element of the second block.
- The algorithm needs to offer speed over precision, we want to know if two set are intersecting, contained, adjacent or none rather than if they intersect at 95.6%.
- Suggest a method to present the data. For example, a venn diagram [http://en.wikipedia.org/wiki/Venn\\_diagram](http://en.wikipedia.org/wiki/Venn_diagram). Explain why you chose this option and its limitations.

## Submit

Email us your response, along with the source code and instructions on how to run it.