**Directions**

The scientific software engineer at Citrine is responsible for developing the services that manage persistence and retrieval of materials and chemical data as well as the machine learning infrastructure for learning on that data. The following technical challenge is meant to be representative of the type of work that you would be doing as an employee at Citrine. There is no time limit, but the problem is designed to take approximately five hours so please do not spend much more time on it than that.

The solution to the challenge should include a readme that describes how the code is configured and how it can be setup and run.

You may use any languages and frameworks that you choose, but please make sure to include directions or utilities to install those tools.

**Problem description**

Each row of the CSV that is attached to this email represents a single material and several of its measured properties. Please complete the following tasks using the data in that file:

1. Design a database schema (SQL or NoSQL) to store the information in the CSV.
2. Create a service to search the data in the database including any of the fields that are available (chemical formula, property name, or property value).
3. Expose the search service through a programmatic API, HTTP endpoint, or CLI.

Please be sure to document any APIs that you create in the readme file that you submit.