

## Overview:

You'll find below is a small and simple assignment to help us understand how you work. There are two core parts: completing the programming task and then presenting / reviewing your approach.

## The Programming Task:

Please implement a simple software that transitions the "unclean" data sample to a "clean" format. Project Requirements:

- **Use of python**
- **Give the possibility to choose from multiple clean output formats: csv, json, xlsx**
- **Unit tests**

### Data Sample:

Provided in the link are the following sets of data

(<https://docs.google.com/spreadsheets/d/18zvhJFtWxIKuX15-Hbq24yP9k1UeYPKL7h6YV1hn5ak/edit?usp=sharing>):

- Sheet "Ceramic\_Raw\_Data": contains some "unclean" data.
- Sheet "material\_property\_map": some information that should be mapped to the clean data.
- Sheet "material\_data\_result": Some ideal end result.

### Data cleaning:

- Strip the values of any additional characters. Multiple values / ranged values should be joined with a comma (",") separator. Temperature association with values should be joined with semicolon (";").
  - 2.5 to 3 W/mK -> 2.5,3
  - >6.04@20C -> 6.04;23
- Map material property names.
- Unit conversion where needed.

## Submission:

Feel free to send a link to a github repository or email the python files you put together.