## Assignment 2

This is an individual assignment; however, you can take support from your classmates. The final submission requires a report with your code, and plots supporting your answers. During the final discussion you will be asked to describe your code, approach and conclusions.

The grade of this assignment is complete/incomplete.

### Operations data

Data is collected during regular operation of industrial equipment, this operations data can be used to understand the constraints of the operations, quality of equipment, and can be used to optimize the operations. The first step is to read the data and perform statistical operations to develop understanding about the data.

To complete the assignment you have been provided with raw data file machine\_data.csv and starting code machine\_data.py.

Submit your solutions in pdf format, with code and plots supporting your answers.

* The provided file machine\_data.csv contains raw data of same part procured from 3 different manufactures encoded as A, B, C
* The system is run to failure under load
* The load and the operation time is provided in each row for an individual part.

Questions

* What is the range of load and time during operation for each manufacturer?
* What is the most expected load value?
* How are the load and time related?
* Which distribution best describes the load?
* Which distribution best describes the time?
* Which manufacturer has the best performance and why?