**Discussion 2: Numpy**

1. What 3 factors of your code should you consider when writing programs?

* Memory
* Performance speed (How long to run/write the code)
* Usability (Easy to understand/well documented)

1. What is Numpy?

Well known Python package that works with numerical data that is structured around the array object. This package is widely used in other well known data science packages such as Pandas, SciPy, Matplotlib, and more.

1. What is an array?

 A grid of same data type of values that contains information about the raw data, how to locate an element, and how to interpret an element.

1. Why use arrays if we have lists?

Arrays are faster than lists, more compact, and use less memory to store the data

1. What is the transpose of this matrix?

Matrix = | a b c | Matrix transpose = | a d g|

| d e f | |b e h|

| g h j | | c f j |