



Break the chains!

Target:

Get to know:

- Numerical Python [NumPy] library

Resources:

- 1- [Udacity](#) professional data analysis course [Recommended]
- 2- [Elzero Web School](#) NumPy videos [A very good alternative in Arabic]
- 3- [Official NumPy documentation](#)

Problems:

Problem 1 □ Create a 3x3 array that contains a diagonal of nines

Problem 2 □ Create a 4 x 4 ndarray that only contains consecutive even numbers from 2 to 32 (inclusive) and use **boolean indexing** to pick out the values that are within 1/2 standard deviations of the mean

Problem 3 □ Create a 9x9 array that contains only zeros of type int

Problem 4 □ Use **broadcasting** to create a 4 x 4 ndarray that has its first column full of ones, its second column full of twos, its third column full of threes, etc...

Evaluation:

Problem 1, 4 □ 2 points each

Problem 2, 3 □ 3 points each

Deadline:

3 Days #Monday 20 March at 9 PM