

**Homework 1** (Due Wed Sep 19th at 3pm in class): In this first homework you will not only learn Python, but while at it, you will also learn to build a search engine! Read and practice the [introduction to python handout](#) and do exercises 2.1, 2.2, 2.3 and 2.4 (please follow the guidelines on how to hand in the homework). To build the small Google search engine, you will need the following webpages: [pages.zip](#). Please attend the tutorials to learn about python (how to install it, how to program in python, and how to understand what pageRank does). NOTE: This handout and homework are examinable. The goal of exercise 2.1 is for you to revise eigenvalues. We can do awesome stuff with eigenvalues as we'll soon learn. If your knowledge of these is rusty, I strongly recommend the following [linear algebra handout](#). The goal of the other two exercises is to get you to learn and practice python. If you want to learn more about the multivariate Gaussian distribution, go the [wikipedia page](#).