IT204 Lab 1: 13 August 2018.

1. Read the subsections on Python's inbuilt List and String Collection Data Types: http://interactivepython.org/runestone/static/pythonds/Introduction/GettingStartedwithData.html#built-in-collection-data-types.

2. A strobogrammatic number is a number whose numeral is rotationally symmetric, so that it appears the same when rotated 180 degrees. In other words, the numeral looks the same right-side up and upside down (e.g., 69, 96, 1001). Write a Python program to get all strobogrammatic numbers that are of length n. For example,
Given n = 2, return ["11", "69", "88", "96"].
Given n = 3, return ['818', '111', '916', '619', '808', '101', '906', '609', '888', '181', '986', '689']

3. Devise an experiment to verify that the list index operator is indeed *O*(1), You might want to read sections 2.5 and 2.6 of Miller and Ranum's book here: http://interactivepython.org/runestone/static/pythonds/AlgorithmAnalysis/PerformanceofPythonDataStructures.html and http://interactivepython.org/runestone/static/pythonds/AlgorithmAnalysis/Lists.html

Optional (Only do if you have completed all previous exercises):

1. Read and execute the programs in Section 4.7 (More on Defining function) of the Python tutorial.

2. Read Section 4.8 of the Python tutorial.