## Math589 Homework 1

**Note:** To submit the k-th homework, simply put your files in the folder HWk on CoCalc, and it will be collected on the due day.

- 1. You should have received an invitation email from CoCalc. Do the following:
  - (a) Register an account with your **school email**. (Let me know if you prefer using a different email address.)
  - (b) Open the project whose name contains 2019SMath589.
  - (c) Open HW1 > name.txt.
  - (d) Enter your name in name.txt and click on Save.

[This assignment can only be done electronically.]

2. Try to create a simple graph G on n vertices such that the degrees for each vertex are distinct. For each fixed n, find an example or prove that such graph does not exist.