

## **STAT107** Data Science Discovery

LAB: PLOTS

Man Fung (Heman) Leung Fall, 2021

University of Illinois at Urbana-Champaign



- Please work in a group of 2–4 students
  - collaboration is important in data science!
  - meet new friends and discuss :)
  - let us know if you have any questions

## Random fact of the day

The Zen of Python can be displayed by entering import this.

- Common/potential mistakes
  - "random\_state" in sample()
  - "replace" in sample()
  - individual reflection(s) (2 pts each)
  - concat() vs merge(..., how='outer')
  - concat() before sample() in stratified random sampling
- Running the test cases successfully do not imply full score

- Main page
- Retrieve the lab using git
- Complete the notebook
  - pre-lab survey for 2 extra points
  - install matplotlib
  - hint for puzzle 2.2: use ["Salary"] ["mean"].values[0] after subsetting the correct department
  - hint for puzzle 3.1: try groupby("Gender").plot.box()
  - post-lab survey for 2 extra points
- Submit your work. Feel free to:
  - ask us questions
  - leave whenever you finish the lab

## Default total number of cells: 62

- 0.1 in cell 7
- 0.a in cell 9 (reflection)
- 1.1 in cells 13–16
- 1.a in cell 19 (reflection)
- 1.2 in cell 21
- 1.3 in cell 23
- 2.1 in cell 26
- 2.2 in cell 29
- 2.3 in cell 32

- 2.a in cell 35 (reflection)
- 2.4 in cells 37–38
- 3.1 in cell 42
- 3.2 in cell 44
- 3.a in cell 48 (reflection)
- 4 in cells 50–51 (reflection)
- 5 in cell 55 (reflection)
- 6 in cell 58 (reflection)