

# COMP 333 — Lab Assignment 1

## Motivation

The purpose of this assignment is for you to apply Python and pandas to a simple example. It builds on Example 1 of Week 2 Lecture for restaurant tipping. It also builds on the labs for Weeks 2–4 on the use of Python and pandas.

## Assignment

Create a Jupyter notebook using Python code and any of its libraries, but especially pandas, to analyse the data in the csv file for restaurant tipping, and to replicate the four plots of the wikipedia article.

Remember to add the new feature “*tip\_rate*”.

You may need to do some self-learning of the plotting libraries for Python. Start with the cheat sheets for matplotlib and seaborn.

## Deliverable

A notebook should indicate

- ▶ your identity (name and student number),
- ▶ the task (ie the course, the assignment number, and a short description of the task),
- ▶ the source of the input,
- ▶ a description of the input (usually accompanied by a listing of the first 10 rows of each dataframe), and
- ▶ the planned output.

Your notebook must document the type — nominal, ordinal, interval, or ratio — of each of the data features in the example.

Your deliverable is the completed ipynb notebook showing all computation, output, and plots.