## SQL Workshop Final Review

### UC Davis DSI

#### 2018

## 1 Review

These questions are meant to be more open ended. Challenge yourself by answering each one in two different ways. This requires three types of knowledge: knowledge of the data / domain (finance), knowledge of the tool (SQL), and critical thinking. This is the next step beyond following instructions.

- 1. What are the most profitable companies?
- 2. What are the most valuable sectors?

## 2 Joins

From Wikipedia:

The Standard Industrial Classification (SIC) is a system for classifying industries by a four-digit code. Established in the United States in 1937, it is used by government agencies to classify industry areas.

### Single Joins

- 1. Select the ticker, company name, and SIC code with corresponding description for companies that have SIC codes.
- 2. Select the ticker, company name, and SIC code with corresponding description (possibly NULL) for all companies in the company\_info table.
- 3. Which 4 digit SIC codes have the most companies?
- 4. Modify the query above to only return SIC codes with at least 5 companies.

## Multiple Joins

- 5. Use inner joins to produce a table with columns for company name, state, SIC code, and SIC description.
- 6. Modify the above query to produce a table with columns for state, SIC code, SIC description, and count of companies located in that state with that SIC code.
- 7. Modify the query above to only return rows with a count of at least 2 companies.

# 3 Putting It All Together

- 1. Did the Brexit vote affect share prices for commercial banks in the United States? How? Use Google Sheets to show this with a plot.
- 2. Based on the information in the database, what are the dominant industries in New York? How does New York compare to other states?