Lecture 2: Data Frames Warm Up

The Scenario

Organizations always need some time to warm up to data. Often times, simple statistical reports are a way to build trust. Given the following data frame containing financials from organizational operations, write the appropriate expression to extract the right information.

Note that revenue is total revenue in millions, rev_target is the target revenue for a given month, elec_bill is the electricity bill in thousands, and social_media is the number of likes. All data are monthly numerical values.

| ## | | month | quarter | revenue | rev_target | elec_bill | social_media |
|----|----|-------|---------|---------|------------|-----------|--------------|
| ## | 1 | 1 | 1 | 266 | 284 | 128 | 80 |
| ## | 2 | 2 | 1 | 289 | 291 | 141 | 257 |
| ## | 3 | 3 | 1 | 302 | 214 | 145 | 14 |
| ## | 4 | 4 | 2 | 138 | 124 | 207 | 133 |
| ## | 5 | 5 | 2 | 121 | 104 | 194 | 240 |
| ## | 6 | 6 | 2 | 268 | 172 | 154 | 37 |
| ## | 7 | 7 | 3 | 299 | 266 | 213 | 168 |
| ## | 8 | 8 | 3 | 246 | 299 | 191 | 62 |
| ## | 9 | 9 | 3 | 217 | 241 | 176 | 38 |
| ## | 10 | 10 | 4 | 133 | 146 | 187 | 226 |
| ## | 11 | 11 | 4 | 171 | 100 | 160 | 269 |
| ## | 12 | 12 | 4 | 174 | 146 | 153 | 112 |

The Questions

Assuming the data is in data frame format, write commands to answer the following questions.

Example:

How many rows of data do you have?

```
nrow(df)
```

[1] 12

Get into it

- 1. What was the total revenue for the year?
- 2. What was the most number of tweets?
- 3. How much was the total elec bill for Q2 and Q3?
- 4. What were the last 5 monthly electricity bill amounts and revenues?
- 5. In which month did we hit our lowest number of likes?
- 6. In which quarter did we hit our highest revenue?
- 7. In how many months did we hit our revenue targets?
- 8. In which months did we hit our target?
- 9. In months where we missed the target, what was the total lost revenue?
- 10. Provide the electric bills for the first month of each quarter.