WEEK 3

Finding Data & Skill building

IST719 Information Visualization

WEEK 3

Overview

- Final project introduction
- Plot Dimensions
- Finding Data
- R skill building

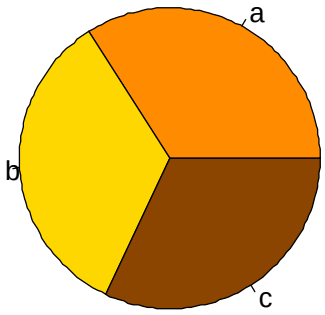
Final Project

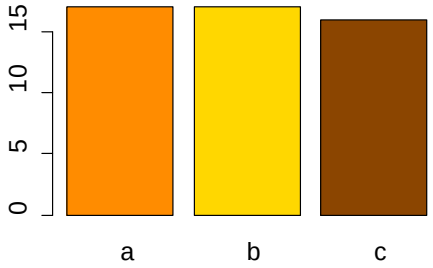
- December 2nd.
  - Wednesday Class: 10:00 AM to 12:00
  - Tuesday Class: 1:00 PM to 3:00
- All details on Blackboard
  - Data set scoring
  - Rubric
  - Example Posters

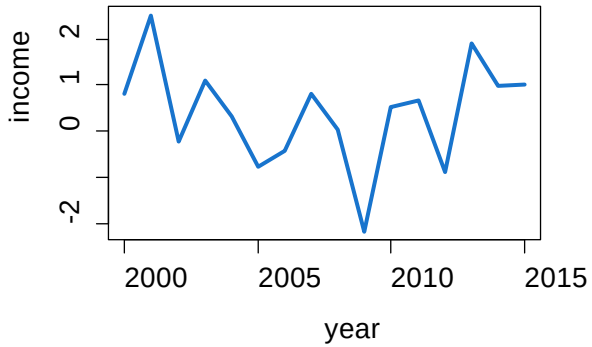
Dimensions of your data

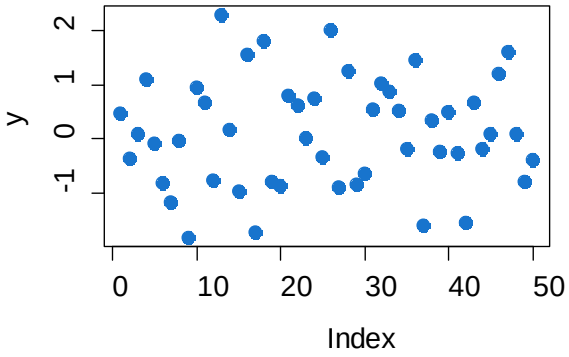
- Single
  - Numeric or categorical
  - Distribution within a single variable
  - Frequency within a single variable
- Multiple
  - Relating one variable to another
  - Distribution of variable across categories
  - Frequency of a categories across other categories

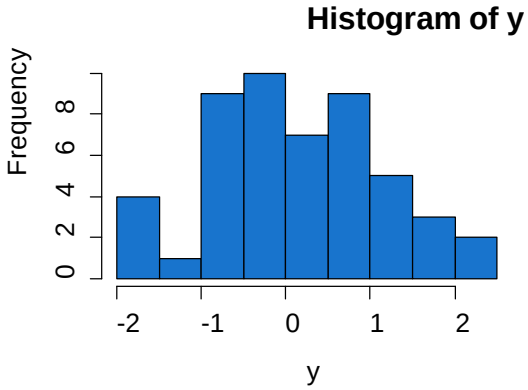
Single Dimension Plots

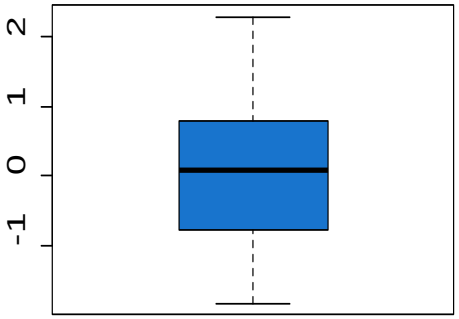




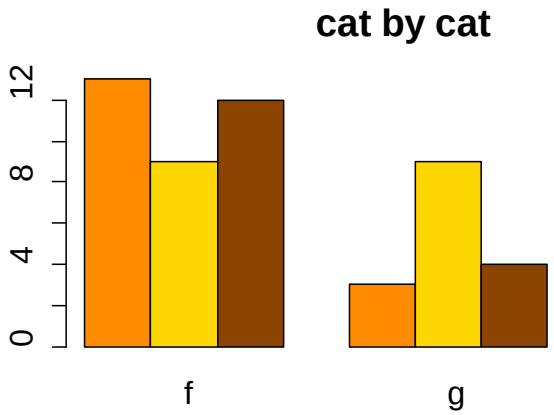


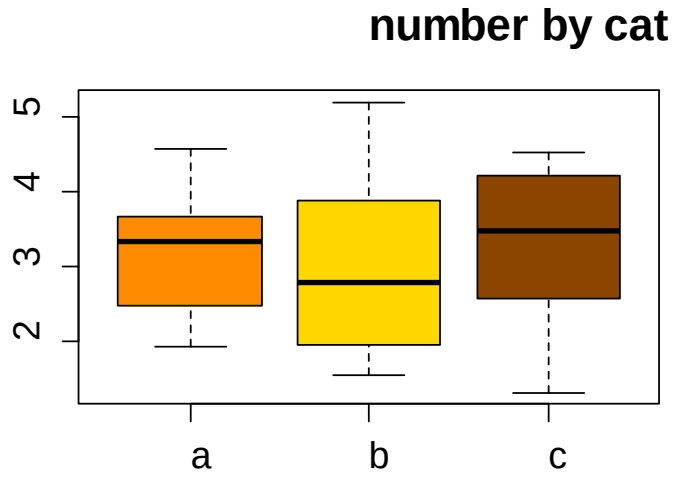


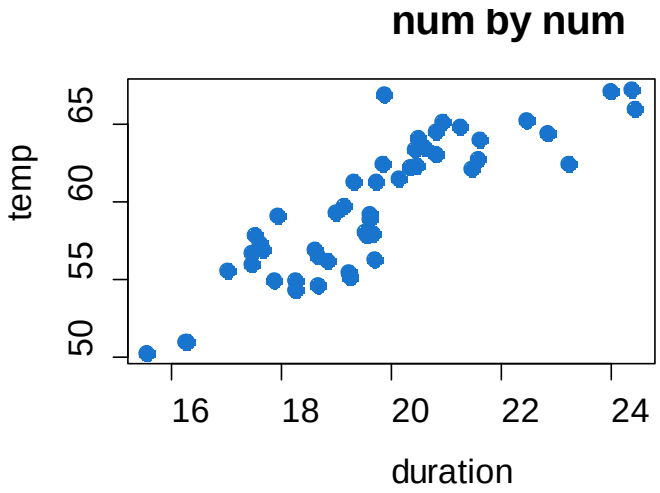


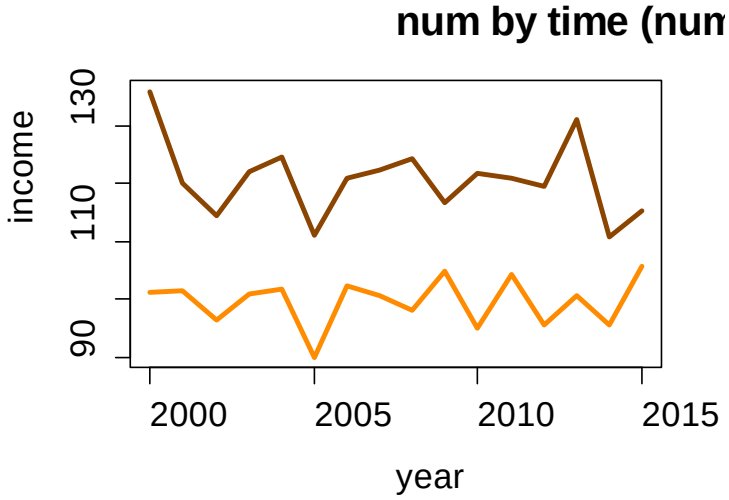


Multi-Dimension Plots

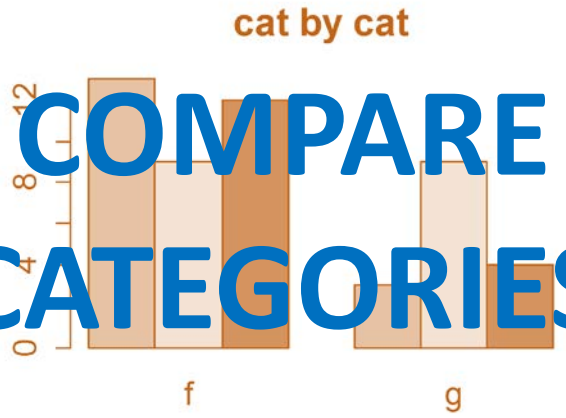




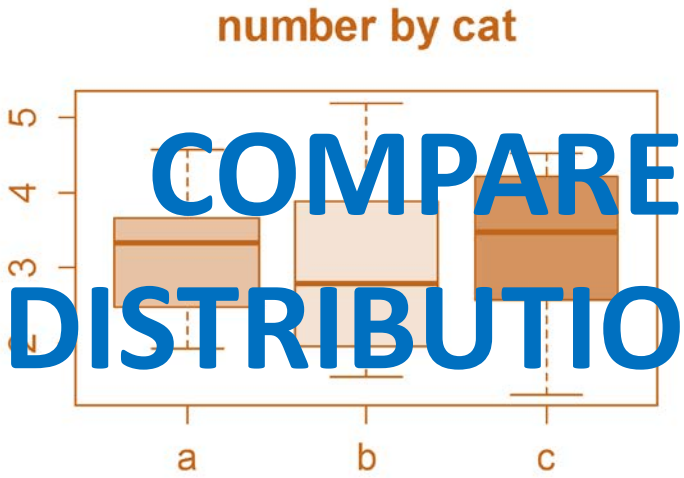




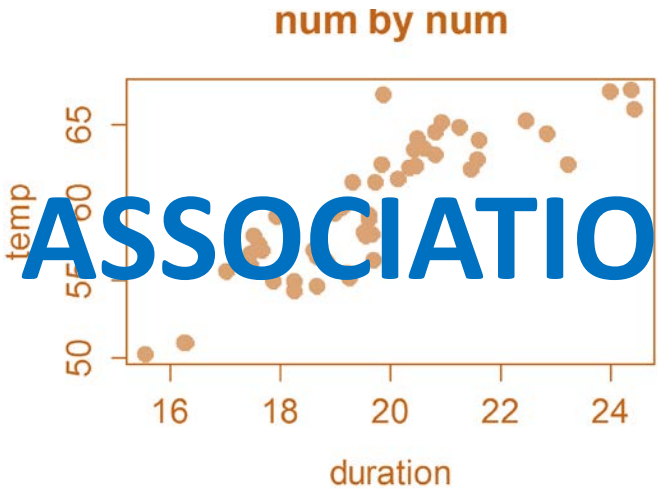
Multi-Dimension Plots



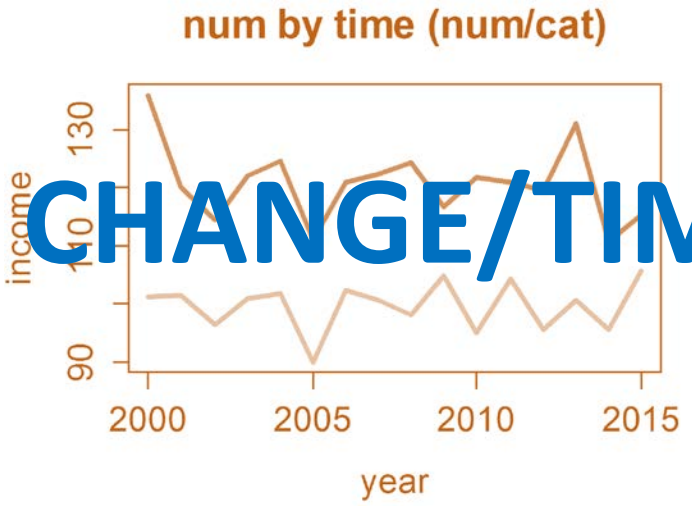
COMPARE CATEGORIES



COMPARE DISTRIBUTIONS



ASSOCIATION



CHANGE/TIME

Comparisons

What kinds of comparisons?

- Magnitude
  - Nominal: no particular order, frequency
  - Ranking: magnitude
  - Parts-to-whole: proportions
  - Deviation: differences between sets
  - Time-series: change over time
- Sorting
  - Low to high
- Position
  - Maps
- Strength of relationships

Lab Time

Find a dataset

- Universities
  - https://www.icpsr.umich.edu/icpsrweb/index.jsp
  - http://researchguides.library.syr.edu/c.php?g=258090&p=1725743
- Government
  - https://www.data.gov/
  - https://www.climate.gov/maps-data/datasets
    - Education / Data (tab)
- Data Clean up
  - http://www.census.gov/construction/c30/c30index.html

Data Sets

For help:

Paul H. Bern, Ph.D.

Research Data Services Librarian

phbern@syr.edu

http://researchguides.library.syr.edu/data