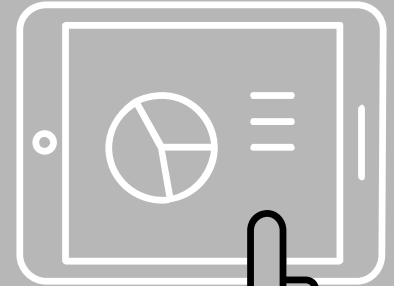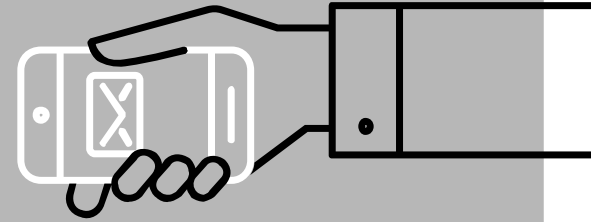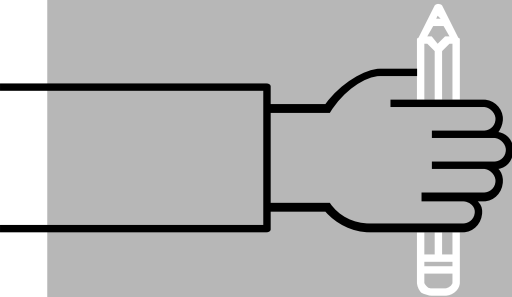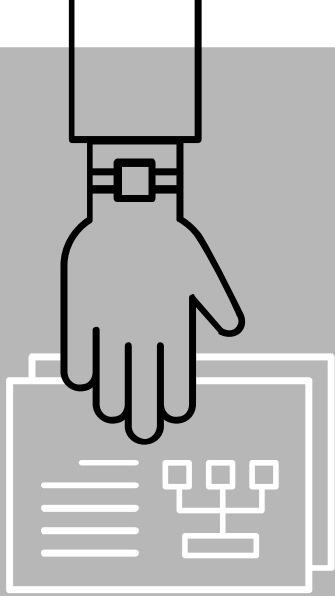UNCG Digital Bootcamp,
Tools & Tech Workshop

August 19, 2019

Designing and developing effective data viz.

Please sign in at:
go.uncg.edu/datavizbootcamp
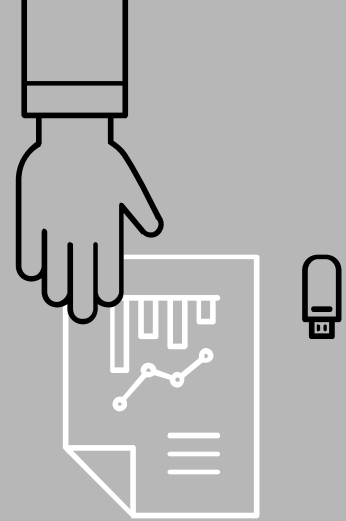
Goals

▷ Learn what data viz. Is

▷ Explore some common tools
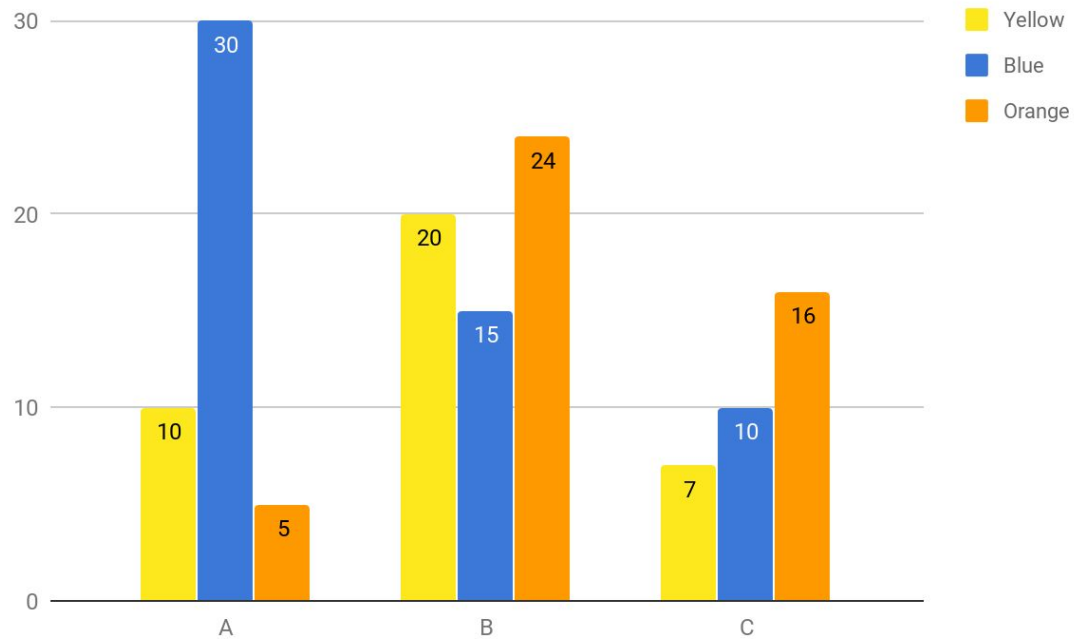
▷ Practice planning methods and design principles

Tables VS Viz

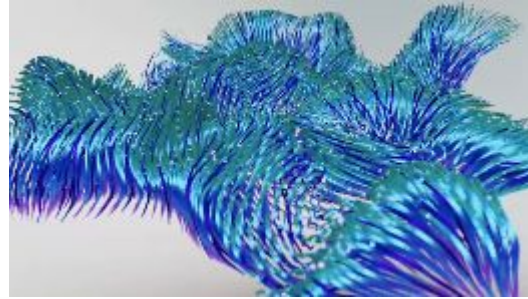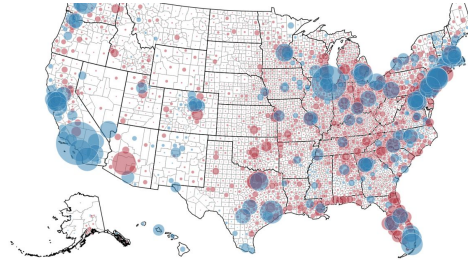|	A	B	C
Yellow	10	20	7
Blue	30	15	10
Orange	5	24	16

Tables VS Viz

What is Data Viz?

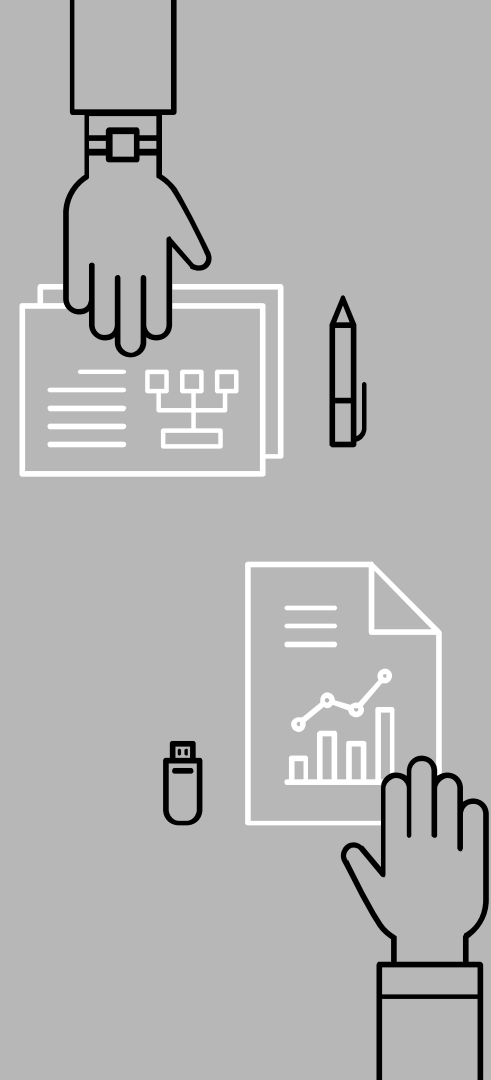Wordcloud created using Word Cloud Visualization app by Patrick Wied via splunkbase

"Website Visits," *Technology Garden,* Wimbledon IBM via Variable

"Excuses for being late to class"" via Excel Easy
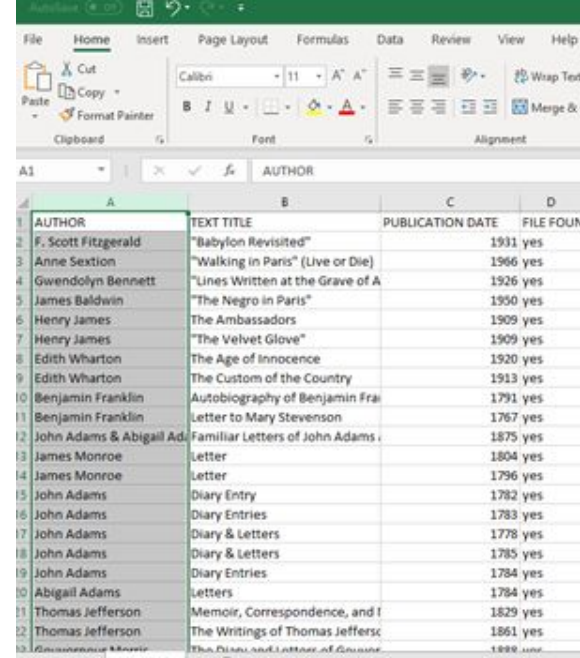

"The 2016 Election" via Time

The project:

- Seeing literature as data & mining for place names
- Mapping the results to visualize findings

The tools:

- R
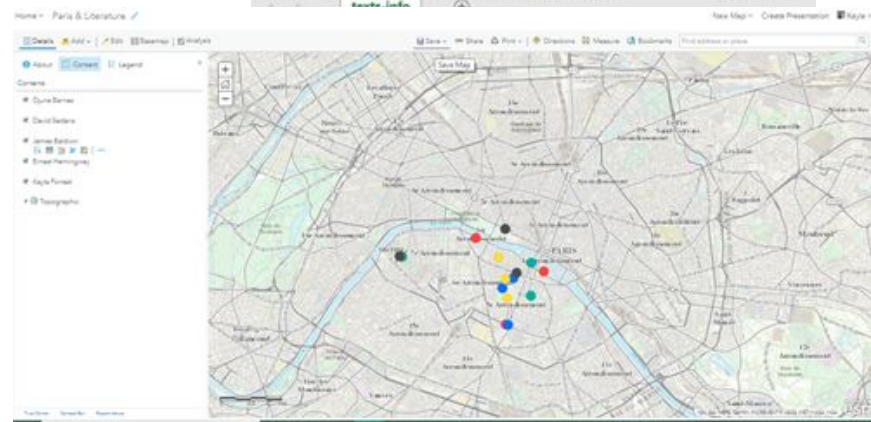- *Text Analysis with R for Students of Literature* by Matthew Jockers
- Pluralsite
- ArcGis

The plans:

- Finish coding and adding to the map
- Combined publication in *Cultural Analytics* with Dr. Beveridge
- Use as part of my research and academic profile

Data & Design
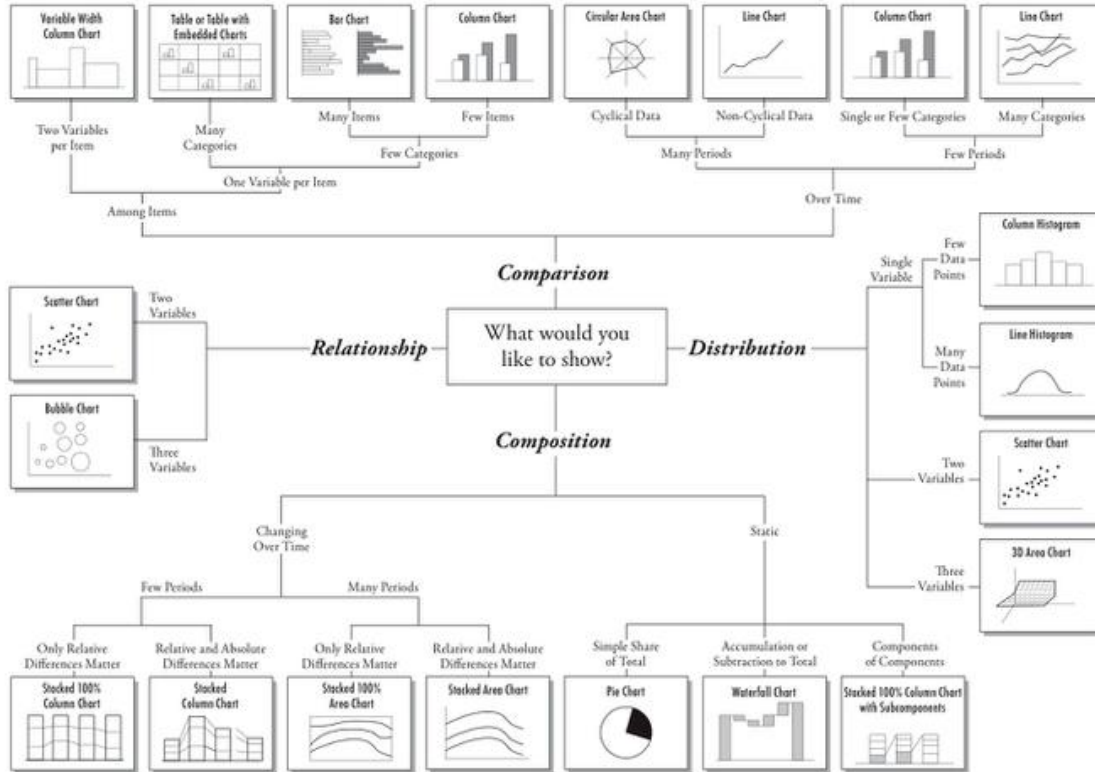
"Chart Suggestions" via Infographics Blog

Accurate

Length (aligned)

Length

Slope

Angle

Area

Color intensity

Volume

Generic

Color hue
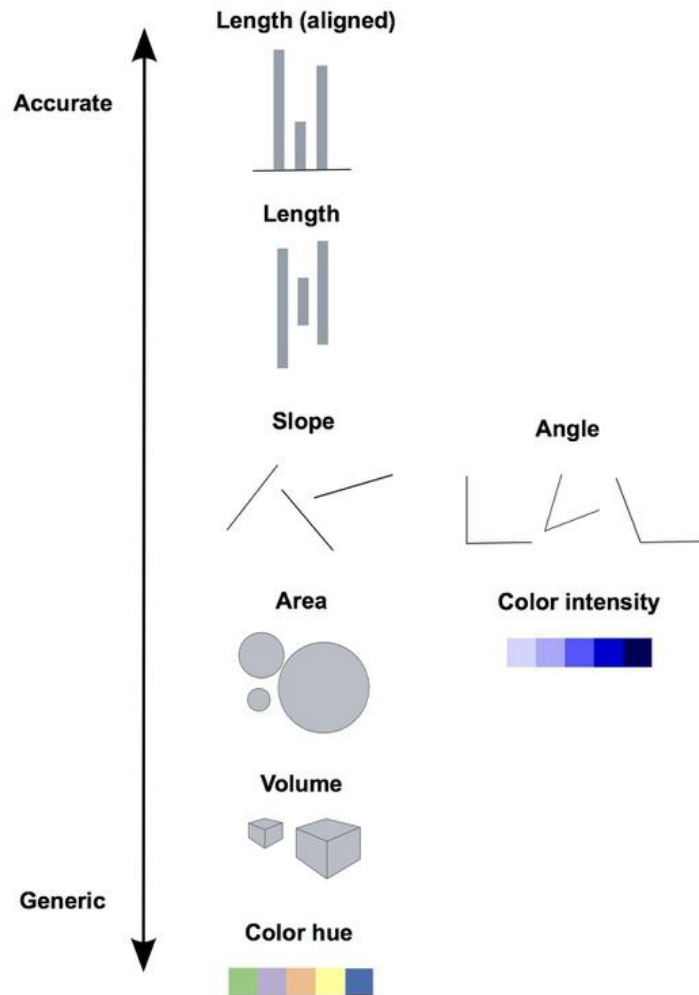
Ways to represent and compare data

9

Problem Viz

Types of debt

The total owed by the average U.S. household, by debt type.

Credit cards	$16,748
Mortgages	$176,222
Auto loans	$28,948
Student loans	$49,905
Any type of debt	$134,643

Utility classes should not have a public or default constructor. = 0.014

Method length is X lines (max allowed is X). = 0.027

'X' is followed by whitespace. = 11.625

'X' should be alone on a line. = 0.027

Avoid inline conditionals. = 0.822

'X' construct must use '{}'s. = 3.574

Comment matches to-do format 'X'. = 0.041

Expression can be simplified. = 0.178

'X' is not preceded with whitespace. = 7.695

Empty statement. = 0.014

Line is longer than X characters. = 6.312

'X' should be on a new line. = 3.177

'X' is not followed by whitespace. = 6.463

TODO = 0.055

Parameter X should be final. = 10.804

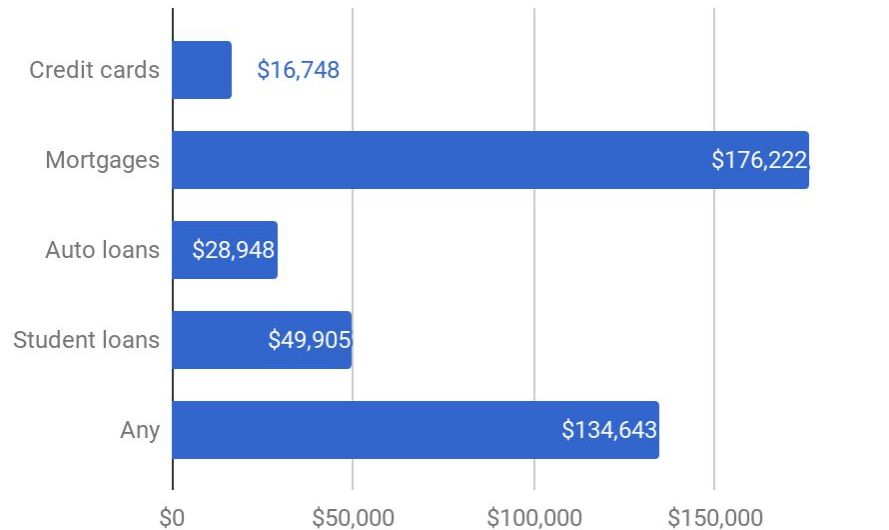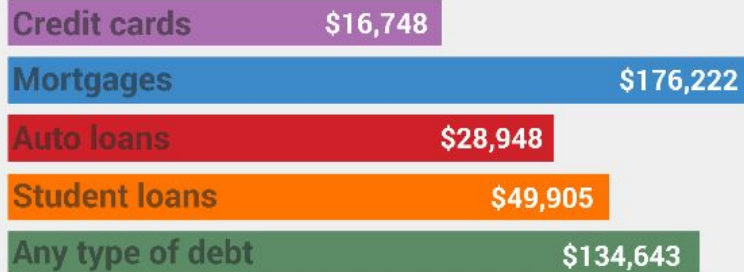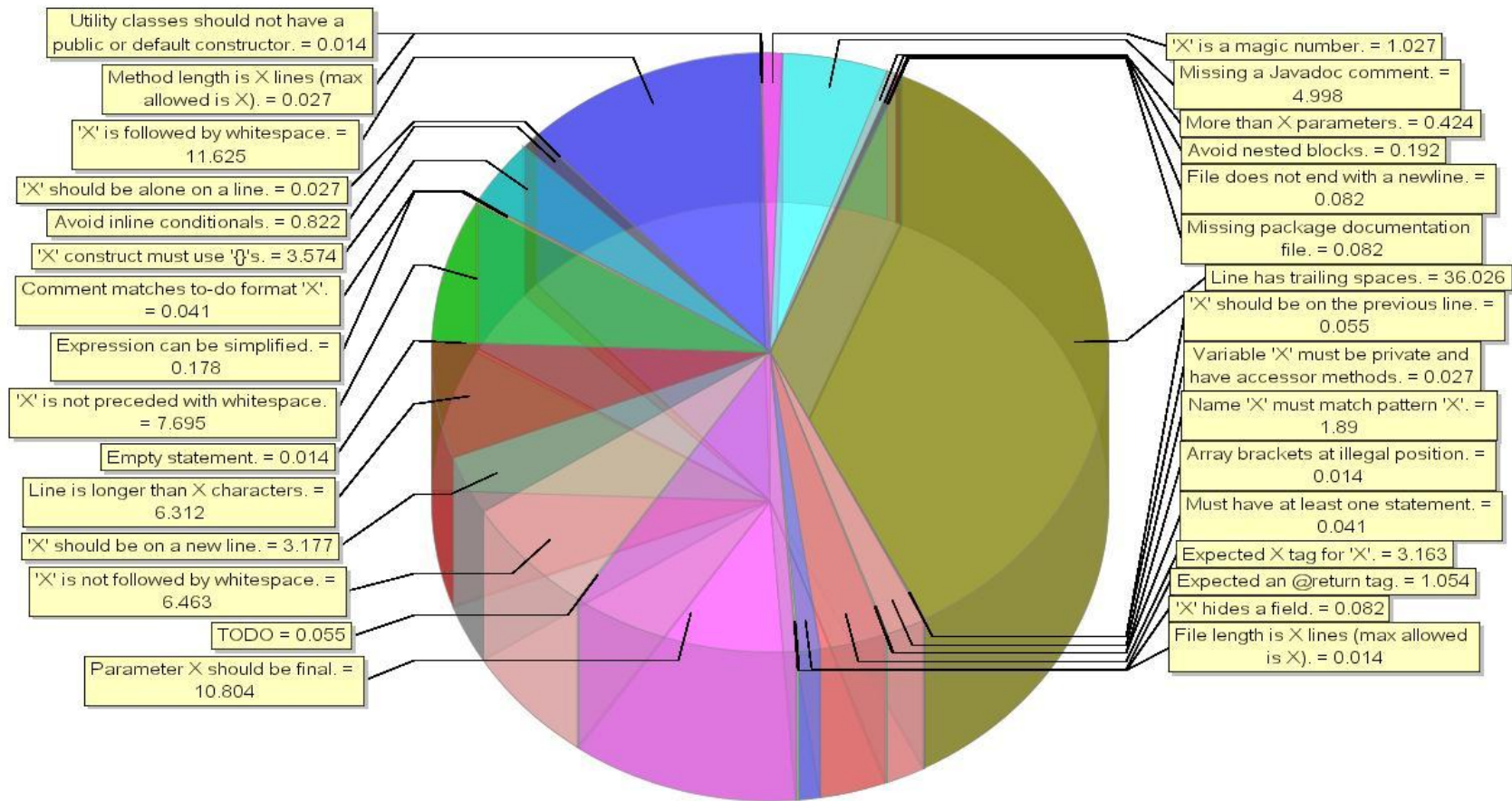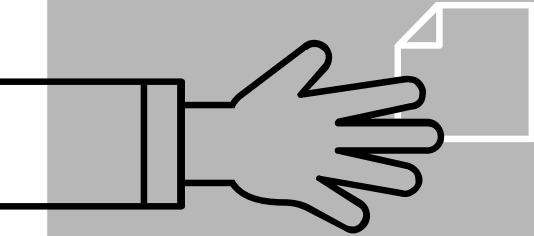'X' is a magic number. = 1.027

Missing a Javadoc comment. = 4.998

More than X parameters. = 0.424

Avoid nested blocks. = 0.192

File does not end with a newline. = 0.082

Missing package documentation file. = 0.082

Line has trailing spaces. = 36.026

'X' should be on the previous line. = 0.055

Variable 'X' must be private and have accessor methods. = 0.027

Name 'X' must match pattern 'X'. = 1.89

Array brackets at illegal position. = 0.014

Must have at least one statement. = 0.041

Expected X tag for 'X'. = 3.163

Expected an @return tag. = 1.054

'X' hides a field. = 0.082

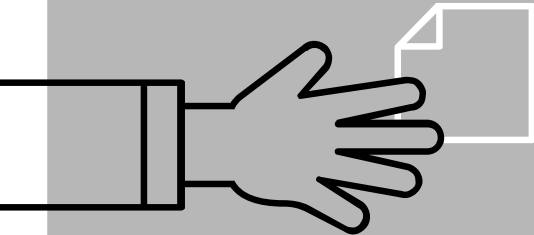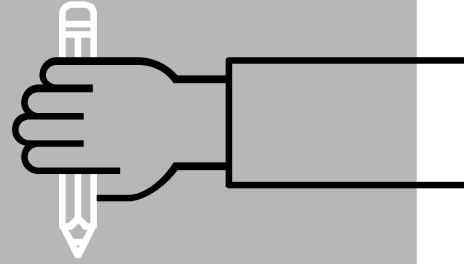File length is X lines (max allowed is X). = 0.014

Numeric Data & Google Sheets
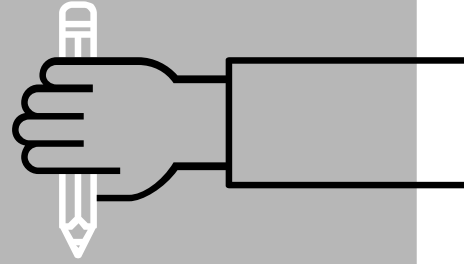
Text Mining &
Non-Numeric Data

THANKS!

Any questions?

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▷ akbeveri@uncg.edu | aaronbeveridge.com