Data acquisition and visualisation

Autumn 2015

Answers to the eleven questions.

Question 1

- Descriptive
- Exploratory
- Inferential
- Predictive
- Causal
- Mechanistic

Question 2

The primary goal of any data visualisation is to inform

Question 3

$7,418,900,000,000

Question 4

Histogram

Question 5

ISN2004

Question 6

- Remove the footnotes in cell values, so to convert values to numbers
- Correct the different spellings (*United States*, *U.S.*)
- Handle multiple null values (*NULL* and *NA*)
- Correct the misspelling (*United Knigdom*)

Question 7

The larger the object appears on the map, the larger the map's scale

Question 8

Sequential

Question 9

- Check whether the data you're looking for is already available
- Plan ahead to save time
- Check the rules about fees
- Know your rights
- Say that you know your rights
- Keep it simple
- Keep it focused
- Think inside the filing cabinet
- Be specific
- Submit multiple requests

- Submit international requests

- Do a test run

- Anticipate the exceptions

- Ask for access to the files

- Keep a record

- Make it public

- Involve colleagues

- Ask for raw data

- Ask about organisations exempt from FOI laws

Question 10

- Column headers are values, not variable names

- Multiple variables are stored in one column

- Variables are stored in both rows and columns

- Multiple types of observational units are stored in the same table

- A single observational unit is stored in multiple tables

Question 11

Chart 1:

- No zero on the x-axis

- Unnatural x-axis labels (*5,7%, 6,0%*)

Chart 2:

- Two y-axes

Chart 3:

- Too many zeroes on the y-axis

- X-axis labels perpendicular to the axis line

- No legend

- *USD* redundant on y-axis (it should be the axis title)