Problem Solving Tasks 2

Your name

3/22/2019

Problem solving task 2, for submission

Problem solving task 2 is due Thursday 4th April at midnight, and is worth 6% of your final grade.

This task will have two sections: first, you will need to make the plots to answer the questions given here (based on the lecture and workshop in week 4 – 1D and 2D visualisation). For each question you need at least one plot, and you need to explicitly answer the question in words (short is fine, but it must be supported by the figure).

Then, next week we will add tasks that are based on the lecture and workshop in week 5. You will add those to this document and edit your plots, so save a copy of this somewhere you will have access to it for both workshops.

Part 1

See next week's workshop for Part 2

Question 1

Using the dataset `ChickWeight`, does diet impact weight?

Question 2

Using the dataset `quakes`, design a visualisation that shows the variation of earthquake magnitudes

Question 3

Using the dataset `pressure`, are temperature and pressure related?

Question 4

Using the dataset `mpg`

4a)

What are the most and least popular car manufacturers?

4b)

Do city miles per gallon (`cty`) correlate or interact with any other variables? Explore 2.

Question 5

Using the dataset `warpbreaks`, what should I do to minimise my yarn breakage?

Question 6

6a)

Using the dataset `residential_property_prices` (within the `grattan` package), when should I have bought a house in Brisbane? Give me a few recommendations.

6b)

If I want to be as cheap as possible, has my best choice changed since 2005?

Question 7

Type `data()` into the console to see a list of all data available in R base or other packages. Explore any dataset you like, produce three plots, and write 1 sentence about what I might discover from that plot