Quantitative Data Analysis Assignment 1

The assignment requires you to analyse data from the Irish Social Science Data Archive (Second Lisbon Referendum (October 2009)). You can find the dataset on Moodle. You **must** use the version posted on Moodle. The original version came from [here](https://www.ucd.ie/issda/data/eureferendums/). You can find out more information about the data at this address. A codebook for the data is available on Moodle.

The assignment requires you to carry out a series of tasks. **You should also comment on the results you generate and explain to the reader what they show.** In addition, you should comment on any analytical choices you make.

The assignment **must** be produced using **R Markdown**. You must submit both the *.Rmd* file and the knitted *html* file.

You should spend time to make the output of your work presentable. For example, charts and tables should be properly labelled i.e., no raw variable names, labels which clash and so on.

**Word counts**

The assignment should have no more than 1,000 words. To count words in an R Markdown document you can use this [add in](https://github.com/benmarwick/wordcountaddin). First, check you have the devtools package installed. If you are a Windows user, you may also have to install [R Tools](https://cran.r-project.org/bin/windows/Rtools/). Once this is done, you can run:

devtools::install\_github("benmarwick/wordcountaddin", type = "source", dependencies = TRUE)

You can then get a word count by clicking on the relevant option on the **Addins** menu. Words are counted using two different methods. You can select either. If you have problems getting the add in to work, you can count using another method e.g., pasting the text into Microsoft Word.

**Questions**

1. What does the dataset refer to? Why was it collected? How was it collected? What was the context?
2. According to the data, how many people voted **In Favour** of the Treaty of Lisbon in the referendum held in October 2009, and how many voted against **Against** ? Present a table which shows numbers and percentages. Present an appropriate plot.
3. What was the average age of people who voted **In Favour** and people who voted **Against**. Plot the distribution of age for both the **In Favour** and **Against** voters on the same plot.
4. Plot the percentage of people voting **In Favour** and **Against** for each socio-economic class.
5. How did the proportion voting **In Favour** and **Against** vary by education level?
6. Using a plot, show how the proportion voting **In Favour** and **Against** varied by how much knowledge a person reported they had about the European Union. What does that pattern show?
7. Is there a relationship between how much knowledge a person thinks they have about the EU and whether they think Switzerland is a member of the EU? Show this using a plot and describe what, if any, relationship there is.