Question 1.1

what are the differences between the DOM as shown by the[DOM inspector](http://en.wikipedia.org/wiki/DOM_Inspector) and the HTML source code?

DOM is Document Object Model, which is a programming interface for HTML,XML and SVG documents. It provides a structured representation of the documents, in the DOM, there are table, caption and tbody tags, and there are tr tags whose class is “row”, all these mentioned tags and classes do not exit in HTML source code;In the HTML source code, we see HTML and Javascripts(D3) written between the tags.

Why would you use the DOM inspector?

We can use DOM inspector to inspect, browse and edit the Document Object Model of HTML or XML based documents. In DOM, documents hae a logical struction which his very much like a tree that closely resembles the documents it models, thus it provides a quick look of the documents structure.

When is the HTML source useful?

DOM is Document Object Model, which is a programming interface for HTML,XML and SVG documents. It provides a structured representation of the documents; the DOM of the page containing table is a tree model representing HTML, and we see HTML and Javascripts(D3) written between the tags; the HTML is a markup language, and this table.html file we see has a table which represents the associated DOM in text.

Question 1.2

What piece of software generates this table? Where are the original data stored?

This piece is generated in Javascript D3, and the original data is stored in countries\_2012.jason file.

**Question 3.1:** Could you aggregate the table using other columns? If you think yes, explain which ones and how you would group values. Which HTML widgets would be appropriate?

**Question 4.1** What does the new attribute years hold?

**Question 5.1** What are the pros and cons of using HTML vs. SVG? Give some examples in the context of creating visualizations.

**Question 7.1** Give an example of a situation where visualization is appropriate, following the arguments discussed in lecture and in the textbook (the example cannot be the same as mentioned in either lecture or textbook).

**Question 7.2** Which limitations of static charts can you solve using interactivity?

**Question 7.3** What are the limitations of visualization?

**Question 7.4** Why are data semantics important for data?

**Question 7.5** Which relationships are defined for two attributes of (a) quantitative, (b) categorical, or (c) ordinal scale?

**Question 7.6** Which visual variables are associative (i.e., allow grouping)?

**Question 7.7** Which visual variables are quantitative (i.e., allow to judge a quantitative difference between two data points)?