DECLARATION: I understand that this is an **individual** assessment and that collaboration is not permitted. I have read and I understand the plagiarism provisions in the General Regulations of the University Calendar for the current year, found at http://www.tcd.ie/calendar. I understand that by returning this declaration with my work, I am agreeing with the above statement.

1 a)

The difference between explanatory and exploratory visualization is that explanatory visualization deals with presenting the data in a way that communicates a concept that the designer intends to visualize to the reader. Explanatory visualization also tries to persuade its readers and the designer may have filtered the data to be able to persuade readers. At the same time exploratory visualization is about learning more about the data and analysing it. Exploratory visualization tends to be more informative that explanatory visualization and it also tends to have less filtering and more data in general.

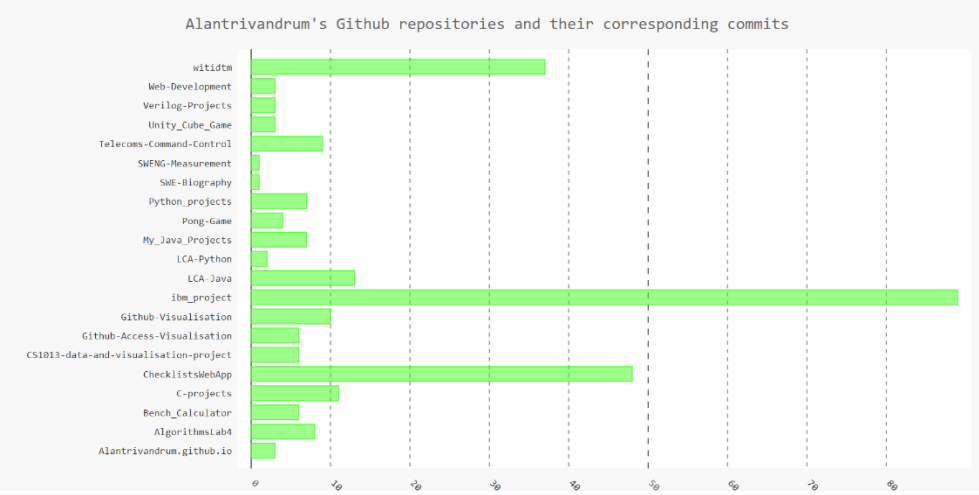
1 b)

Data visualization allows the reader to have a clear idea of the data by making use of graphs and charts to display it in a form that is easily readable. This in turn allows the reader to easily comprehend and analyse the data especially when the data sets are larger. Furthermore data visualization allows the reader to identify patterns and correlations within the data, which are both important aspects of data analysis as far as I am aware.

2

The most recent visualization I have done was in python. The aim of the project was to access and visualize GitHub data. I made use of a python visualization library known as Pygal to implement this visualization. I made use of bar charts and pie charts to visualize data related to GitHub repositories and accounts such as the languages the account is using and how many repositories they may own. Below is a link to the GitHub repository containing the implementation of the visualization and an image of a bar chart that I created for this purpose:

https://github.com/Alantrivandrum/Github-Visualisation



References

[1] T. Munzner, Visualization Analysis and Design, AK Peters / CRC Press, 2014.

[2] “Overleaf,” [Online]. Available: http://www.overleaf.com.

[3] Knuth, “Computers and Typefaces,” [Online]. Available: http://www-cs-faculty.stanford.edu/~uno/abcde.html.