**Project Description**:

Your task is to create a reporting tool that prints out reports (in plain text) based on the data in the database. This reporting tool is a Python program using the psycopg2 module to connect to the database.

Reporting tool should answer the following questions:

1. What are the most popular three articles of all time?
2. Who are the most popular article authors of all time?
3. On which days did more than 1% of requests lead to errors?

**Perquisites:**

1. Install [Vagrant](https://www.vagrantup.com/).
2. Install Virtualbox.
3. Download the vagrant setup files from [Udacity's Github](https://github.com/udacity/fullstack-nanodegree-vm). These files configure the virtual machine and install all the tools needed to run this project.
4. Download the database setup: [data](https://d17h27t6h515a5.cloudfront.net/topher/2016/August/57b5f748_newsdata/newsdata.zip)
5. Unzip the data to get the newsdata.sql file.
6. Put the newsdata.sql file into the vagrant directory
7. Download this project: [log analysis](https://github.com/michellejl/log_analysis)
8. Unzip as needed and copy all files into the vagrant directory into a folder called log analysis

#### Start the Virtual Machine:

1. Open Terminal and navigate to the project folders we setup above.
2. cd into the vagrant directory
3. Run vagrant up to build the VM for the first time.
4. Once it is built, run vagrant ssh to connect.
5. cd into the correct project directory: cd /vagrant/log\_analysis

**Run the following commands from the terminal in the folder in which vagrant is installed:**

1. vagrant up to start up the VM.
2. vagrant ssh to log into the VM.
3. cd /vagrant to change to your vagrant directory.
4. psql -d news -f newsdata.sql to load the data and create the tables.
5. python3 log-analysis-db.py to run the reporting tool.

**Output:**

The output of the project is in the file ‘expected-output.txt’ inside the log\_analysis.