

Python Code Challenge (Must be submitted within 48 hours of receipt via email):

- **Candidate uses their local computer to execute**
- **Candidate uses python (3.6+ preferred, 2.7 is ok)**
- **Candidate may not use any other scripting languages (including bash or any other shells)**
- **Non-standard python libraries are ok**

Create a python virtual environment. Within that environment, write a python script to do the following:

1. Create 3 directories: `teradata_logs`, `new_log_dir1`, and `new_log_dir2`.
2. In `teradata_logs`, generate a random number of files (between 10 and 100).
 - a. The files should be named "`teradata_logs_###.log`" where `###` is the number of the log file (e.g. if you generate 30 log files, they will be named `teradata_logs_001.log` through `_030.log`). Be sure to zero-pad the numbers.
 - b. These log files should contain random alpha-numeric strings, each string should be between 10 and 70 characters in length.
3. Ordering alphabetically, copy all but the last 3 log files in `teradata_logs` to `new_log_dir1`
4. Ordering alphabetically, copy only the last 3 log files in `teradata_logs` to `new_log_dir2`
5. Replace all occurrences of the letters a, b, and c with the word "teradata"(without the quotes) in all log files in `new_log_dir1`
6. The python script should print to stdout a count of the occurrences of the word "teradata" (without the quotes) in `new_log_dir1`.
7. If the count in step 6 is zero, the script should print an error to stderr such as "No occurrences of the word teradata in `new_log_dir1`".
8. Submission must execute from the command-line. The candidate must provide instructions on how to execute.

Submit the code challenge as a Github link or public repository. Submissions must be submitted within 48 hours of receipt of the challenge.

Candidates' submissions will be evaluated on the following:

- Execution (script executes without errors except in the case of step 7)
- Completeness (all steps completed as described)
- Organization
- Readability
- Efficiency
- Documentation