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Coding Exercise – Log Generator and Parser

INSTRUCTIONS ON RUNNING THE SCRIPTS PROVIDED

I have given a folder namely **newQuantil** which consists of 4 Java files and 2 bash Scripts. The instructions on how to run the scripts and obtain the desired results are as follows:

- ➔ Provide Execute permissions to both the bash scripts with the following command `chmod 777 generate.sh` and `chmod 777 query.sh`
- ➔ Run the generator script along with the data path using the following command. `./generate.sh logs` (Logs is the Data path name)
- ➔ It will internally compile 2 Java files and run them. The logs will be generated under the directory provided. Also, I have checked for test case where the directory name is not given. I have attached the screenshot for both the positive and negative test case below.
- ➔ Also, the logs are not generated in a single file as the querying might take time. Hence I have kept a folder for each Server and each such folder has 2 text files one for each CPU Id.
- ➔ Now, it is time to query the generated log file. You can query the log file using the command `./query.sh logs` (This is the directory that was generated in the previous step)
- ➔ Upon running this Command, you will be prompted to the other arguments necessary for the query to take place. The syntax for querying is as follows:
QUERY IP_Address Cpu_Id Startdate StartTime EndDate EndTime
- ➔ The results will be outputted in the command line. Again, I have also tested if the directory exists and for other invalid commands.
- ➔ The snapshots have been attached here and the working video has been sent in email to Kory.

```
cse587@CSE587: ~/newQuantil
File Edit View Search Terminal Help
cse587@CSE587:~/newQuantil$ ./generate.sh
Enter Valid Command with a DATA_PATH
cse587@CSE587:~/newQuantil$ ./generate.sh logs
Compiling Source code
Compilation Successful
Logs are generated under the folder logs
```

- > The above snip is for the Generator. Both the test cases have been handled
- > The below snip if for the Query. All the different test cases have been handled.

```
cse587@CSE587:~/newQuantil$ ./query.sh
Data Path is Required after the ./query.sh
cse587@CSE587:~/newQuantil$ ./query.sh abcd
./query.sh: line 13: cd: abcd: No such file or directory
cse587@CSE587:~/newQuantil$ ./query.sh logs
/home/cse587/newQuantil
Compilation Successful
>QUERY 192.168.0.225 0 2014-10-31 21:10 2014-10-31 ^[[D
You have entered a wrong command.Try with a Correct Format.
>QUERY 192.168.0.225 0 2014-10-31 22:10 2014-10-31 22:15
Entered Query
The command is Query is QUERY
Entered Query Handler
CPU0 usage on 192.168.0.225:
(2014-10-31 22:10, 80%), (2014-10-31 22:11, 78%), (2014-10-31 22:12, 6%), (2014-10-31 22:13
, 21%), (2014-10-31 22:14, 37%)
>EXXt
You have entered a wrong command.Try with a Correct Format.
>EXIT
cse587@CSE587:~/newQuantil$
```

TIME TAKEN TO COMPLETE THE EXERCISE

Sub Tasks	Total Time Taken to Complete it
Installing Vm	30mins
Learning about the basics of Bash	2 to 3 hours
Simple Program to link a Java file from a Bash Script	1 hour
Java Code to generate the logs	Around 3 hours
Java Code to Query the logs	Around 2 hours
Changing the design of generating the logs due to querying purposes	1 hour
Writing Report, Making Video, Documenting the code	3 hours