

## ASSESSMENT REPORT

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**Note:** Keep all the files under the same directory and give execute permission (chmod 777) to all the three files (generate.sh, query.sh, monitoring\_system.h)

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ls -ltr
total 20
-rw-rw-r-- 1 ec2-user ec2-user  20 Apr 14 02:59 README.md
-rw-rw-r-- 1 ec2-user ec2-user 3184 Apr 14 02:59 query.sh
-rw-rw-r-- 1 ec2-user ec2-user  644 Apr 14 02:59 monitoring_system.h
-rw-rw-r-- 1 ec2-user ec2-user 3082 Apr 14 02:59 monitoring_system.cpp
-rw-rw-r-- 1 ec2-user ec2-user  542 Apr 14 02:59 generate.sh
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ chmod 777 generate.sh
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ chmod 777 query.sh
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ chmod 777 monitoring_system.h
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ls -ltr
total 20
-rw-rw-r-- 1 ec2-user ec2-user  20 Apr 14 02:59 README.md
-rwxrwxrwx 1 ec2-user ec2-user 3184 Apr 14 02:59 query.sh
-rwxrwxrwx 1 ec2-user ec2-user  644 Apr 14 02:59 monitoring_system.h
-rw-rw-r-- 1 ec2-user ec2-user 3082 Apr 14 02:59 monitoring_system.cpp
-rwxrwxrwx 1 ec2-user ec2-user  542 Apr 14 02:59 generate.sh
[ec2-user@ip-172-31-93-56 cd-net-assessment]$
```

Execute the generate.sh script with output directory path ("DATA\_PATH").

Snapshot example with directory name DATA\_PATH.

Code gets compiled, Executed and output directory and logs are generated

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ./generate.sh DATA_PATH
mkdir: cannot create directory 'DATA_PATH': File exists
Compiling ...
Successfully Compiled!
Generating Logs!!Please wait
DONE
Logs are generated in DATA_PATH directory
[ec2-user@ip-172-31-93-56 cd-net-assessment]$
```

Logs are generated inside "DATA\_PATH" as shown below

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ cd DATA_PATH/
[ec2-user@ip-172-31-93-56 DATA_PATH]$ ls
data_logs.txt
[ec2-user@ip-172-31-93-56 DATA_PATH]$
```

Now execute query.sh script as shown below

Query the CPU usage for a particular CPU with range of time of stamps.

Snapshot for Test Case Given:

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ./query.sh DATA_PATH
>QUERY 192.168.1.10 1 2014-10-31 00:00 2014-10-31 00:05
CPU1 usage on 192.168.1.10:
(2014-10-31 00:00,11%), (2014-10-31 00:01,44%), (2014-10-31 00:02,49%), (2014-10-31 00:03,20%), (2014-10-31 00:04,17%),
>QUERY 192.168.1.12 0 2014-10-31 00:00 2014-10-31 00:05
CPU0 usage on 192.168.1.12:
(2014-10-31 00:00,10%), (2014-10-31 00:01,16%), (2014-10-31 00:02,61%), (2014-10-31 00:03,64%), (2014-10-31 00:04,69%),
>EXIT
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ █
```

## Error Handling Messages

1. If executed without giving directory name.

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ./query.sh
Please provide proper command.Example- ./query.sh DATA_PATH
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ █
```

2. If executed without proper parameters. Below snapshot shows no destination timestamp

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ./query.sh DATA_PATH
>HELP
COMMANDS are QUERY or EXIT only!!Please try again
Example- QUERY IP CPU_ID start_time end_time
IP in the ranges 192.168.1.1 to 1.255, 192.168.2.1 to 2.255, 192.168.3.1 to 3.255, 192.168.4.1 to 4.235
CPU_ID is 0 or 1
start_time and end_time are in YYYY-MM-DD HH:MM and start_time < end_time
DATA available only for 24 hrs of CPU USAGE for the day 2014-10-31
>█
```

3. If all the query fields are provided and invalid IP address is given

```
[ec2-user@ip-172-31-93-56 cd-net-assessment]$ ./query.sh DATA_PATH
>QUERY 192.168.1.13 0 2021-04-13 00:00 2021-04-13 00:05
No data found. Possible reasons could be either data not found for the given input or Invalid command.
Type Help to see the commands and format of query
No data found. Possible reasons could be either data not found for the given input or Invalid input or Invalid Command.
Type Help to see the commands and format of query
>█
```