

1. Gant execution privilege to .sh files.

chmod 777 generate.sh

chmod 777 query.sh

```
*** System restart required ***
Last login: Wed Jun 29 12:44:34 2022 from 192.168.1.9
flybear@flybear:~$ cd CPUMonitor/
flybear@flybear:~/CPUMonitor$ ls -ltr
total 40
-rw-rw-r-- 1 flybear flybear 3403 Jun 29 11:59 monitoring_system.cpp
-rw-rw-r-- 1 flybear flybear 644 Jun 29 11:59 monitoring_system.h
-rwxrwxrwx 1 flybear flybear 571 Jun 29 12:16 generate.sh
-rwxrwxr-x 1 flybear flybear 17544 Jun 29 12:16 a.out
drwxrwxr-x 2 flybear flybear 4096 Jun 29 12:19 DATA_PATH
-rwxrwxrwx 1 flybear flybear 2975 Jun 29 12:28 query.sh
flybear@flybear:~/CPUMonitor$
```

2. Run bash file for generating testing CPU data.

```
Logs generatad in DATA_PATH directory
flybear@flybear:~/CPUMonitor$ nano generate.sh
flybear@flybear:~/CPUMonitor$ ./generate.sh DATA_PATH
mkdir: cannot create directory 'DATA_PATH': File exists
Compiling source code
Compilation successful
Generating Logs!!Please wait
DONE
Logs generatad in DATA_PATH directory
flybear@flybear:~/CPUMonitor$
```

GNU nano 6.2			
■	IMESTAMP	IP	CPU_ID CPU_USAGE
	1414713600	192.168.1.1	0 14%
	1414713600	192.168.1.1	1 48%
	1414713600	192.168.1.2	0 25%
	1414713600	192.168.1.2	1 88%
	1414713600	192.168.1.3	0 78%
	1414713600	192.168.1.3	1 72%
	1414713600	192.168.1.4	0 49%
	1414713600	192.168.1.4	1 73%
	1414713600	192.168.1.5	0 85%
	1414713600	192.168.1.5	1 76%
	1414713600	192.168.1.6	0 56%
	1414713600	192.168.1.6	1 3%
	1414713600	192.168.1.7	0 59%
	1414713600	192.168.1.7	1 10%
	1414713600	192.168.1.8	0 46%
	1414713600	192.168.1.8	1 30%
	1414713600	192.168.1.9	0 44%
	1414713600	192.168.1.9	1 67%
	1414713600	192.168.1.10	0 58%
	1414713600	192.168.1.10	1 45%
	1414713600	192.168.1.11	0 48%
	1414713600	192.168.1.11	1 16%
	1414713600	192.168.1.12	0 68%
	1414713600	192.168.1.12	1 34%

3. Running Testing query.sh

```
flybear@flybear:~/CPUMonitor$ sudo bash 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 00:00,45%),(2014-10-31 00:01,25%),(2014-10-31 00:02,12%),(2014-10-31 00:03,80%),(2014-10-31 00:04,38%),
>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 00:00,68%),(2014-10-31 00:01,82%),(2014-10-31 00:02,61%),(2014-10-31 00:03,13%),(2014-10-31 00:04,31%),
>
```