

CLOUD COMPUTING

LAB EXPERIMENT – 4

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SRN : PES1UG20CS385

SECTION : G

1a: Pyenv installed and local Python version changed to 3.6.8.

```
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ ls -a
.      examples  node.py      raftos-master  setup.py
..     LICENSE    .python-version  README.md      start_terminals.sh
docs   MANIFEST.in  raftos       requirements.txt  tests
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python -V
Python 3.11.2
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ pyenv versions
system
3.6.8
3.7.2
3.8-dev
* 3.11.2 (set by /home/sanmat/CC/CC_E4_PES1UG20CS385/.python-version)
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ pyenv local 3.6.8
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python -V
Python 3.6.8
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ la -a
.      examples  node.py      raftos-master  setup.py
..     LICENSE    .python-version  README.md      start_terminals.sh
docs   MANIFEST.in  raftos       requirements.txt  tests
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$
```

Leader : node 2.

```
sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ python node.py --node 1
sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ clear
sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ tail -f node1_CUSTOMLOG.log
Leader ls now: 127.0.0.1:8001

sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ python node.py --node 2
sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ clear
sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ tail -f node2_CUSTOMLOG.log
Leader ls now: 127.0.0.1:8001
Done writing VARIABLE
Check the .log and .state_machine files!

sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ python node.py --node 3
sannat@sanmat:~/CC/CC_E4_PES1UG20C5385$ tail -f node3_CUSTOMLOG.log
Leader ls now: 127.0.0.1:8001

0:1bash* sannat 10:32 19-Mar-2020
```

New leader : node 1.

[illegible]

2c: Old leader comes back online, but becomes a follower instead and updates its old state to its new state.

node 2 comes back online, but becomes a follower instead.

```
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python node.py --node 1
^CTraceback (most recent call last):
  File "node.py", line 88, in <module>
    loop.run_forever()
  File "/home/sanmat/.pyenv/versions/3.6.8/lib/python3.6/asyncio/base_events.py", line 438, in run_forever
    self._run_once()
  File "/home/sanmat/.pyenv/versions/3.6.8/lib/python3.6/asyncio/base_events.py", line 1415, in _run_once
    event_list = self._selector.select(timeout)
  File "/home/sanmat/.pyenv/versions/3.6.8/lib/python3.6/selectors.py", line 445, in select
    fd_event_list = self._epoll.poll(timeout, max_ev)
KeyboardInterrupt
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python node.py --node 1

sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ tail -f node1_CUSTOMLOG.log
Leader is now: 127.0.0.1:8001
Leader is now: None
Leader is now: 127.0.0.1:8000
Done writing VARIABLE
Check the .log and .state.machine files!tail: node1_CUSTOMLOG.log: file truncated
Leader is now: 127.0.0.1:8001

sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ tail -f node2_CUSTOMLOG.log
^[[A][A][A][A^C
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ clear
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ tail -f node2_CUSTOMLOG.log
Leader is now: 127.0.0.1:8001
Done writing VARIABLE
Check the .log and .state.machine files!^C
sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$

sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python node.py --node 2

sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ tail -f node3_CUSTOMLOG.log
Leader is now: 127.0.0.1:8001
Leader is now: None
Leader is now: 127.0.0.1:8000
Leader is now: 127.0.0.1:8002
tail: node3_CUSTOMLOG.log: file truncated
Leader is now: 127.0.0.1:8001

sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python node.py --node 3

sanmat@sanmat:~/CC/CC_E4_PES1UG20CS385$ python node.py --node 3
```