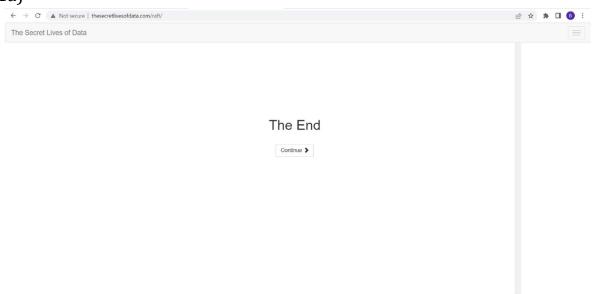
## Consensus Algorithms: Raft

Name – B Pravena SRN - PES2UG19CS076 Section - B

1a)



1b)

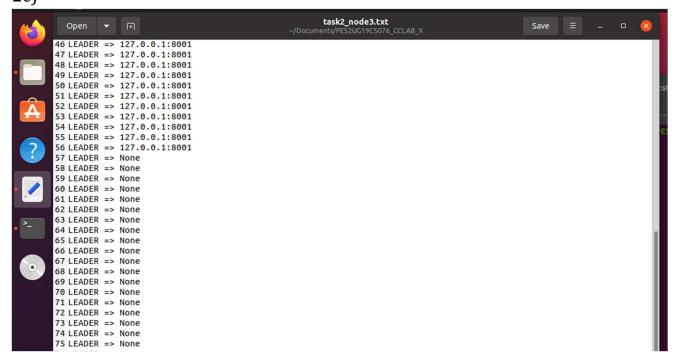
```
pes2ug19cs076@PES2UG19CS076: ~/Documents/PES2UG19CS076_CCLAB_...
Best match: cffi 1.15.0
Processing cffi-1.15.0-cp38-cp38-manylinux_2_12_x86_64.manylinux2010_x86_64.whl
Installing cffi-1.15.0-cp38-cp38-manylinux 2 12 x86 64.manylinux2010 x86 64.whl to /usr/lo
cal/lib/python3.8/dist-packages
Adding cffi 1.15.0 to easy-install.pth file
Installed /usr/local/lib/python3.8/dist-packages/cffi-1.15.0-py3.8-linux-x86 64.egg
Searching for pycparser
Reading https://pypi.org/simple/pycparser/
Downloading https://files.pythonhosted.org/packages/62/d5/5f610ebe421e85889f2e55e33b7f9a67
95bd982198517d912eb1c76e1a53/pycparser-2.21-py2.py3-none-any.whl#sha256=8ee45429555515e1f6
b185e78100aea234072576aa43ab53aefcae078162fca9
Best match: pycparser 2.21
Processing pycparser-2.21-py2.py3-none-any.whl
Installing pycparser-2.21-py2.py3-none-any.whl to /usr/local/lib/python3.8/dist-packages
Adding pycparser 2.21 to easy-install.pth file
Installed /usr/local/lib/python3.8/dist-packages/pycparser-2.21-py3.8.egg
Searching for six==1.14.0
Best match: six 1.14.0
Adding six 1.14.0 to easy-install.pth file
Using /usr/lib/python3/dist-packages
Finished processing dependencies for raftos==0.2.6
pes2ug19cs076@PES2UG19CS076:~/Documents/PES2UG19CS076_CCLAB_X/raftos$
```

2a)

2b)

```
task2_node2.txt
  Open ▼ 🗐
                                                                                                                  Save
                                                                               6 CCLAB X
 1 LEADER => 127.0.0.1:8000
 2 LEADER => 127.0.0.1:8000
3 LEADER => 127.0.0.1:8000
 4 LEADER => 127.0.0.1:8000
 5 LEADER => 127.0.0.1:8000
 6 LEADER => 127.0.0.1:8000
 7 LEADER => 127.0.0.1:8000
 8 LEADER => 127.0.0.1:8000
 9 LEADER => 127.0.0.1:8000
10 LEADER => 127.0.0.1:8000
11 LEADER => 127.0.0.1:8000
12 LEADER => 127.0.0.1:8000
13 LEADER => 127.0.0.1:8000
14 LEADER => 127.0.0.1:8000
15 LEADER => 127.0.0.1:8000
16 LEADER => 127.0.0.1:8001
17 LEADER IS NOW NODE 2
```

2c)



```
pes2ug19cs076@PES2UG19CS076:~/Documents/PES2UG19CS076_CCLAB_X$ cat *.log

("term": 3, "command": {"data_id": 1}}

("term": 3, "command": {"data_id": 1}}

("term": 6, "command": {"data_id": 3}}

("term": 3, "command": {"data_id": 3}}

("term": 4, "command": {"data_id": 3}}

pes2ug19cs076@PES2UG19CS076:-/Documents/PES2UG19CS076_CCLAB_X$ cat *.state_machine

("data_id": 1){"data_id": 3}("data_id": 3)pes2ug19cs076@PES2UG19CS076:-/Documents/PES2UG19CS076:-/Documents/PES2UG19CS076:-/Documents/PES2UG19CS076:-/Documents/PES2UG19CS076:-/Documents/PES2UG19CS076:-/Documents/PES2UG19CS076-CCLAB_X$

pes2ug19cs076@PES2UG19CS076:-/Documents/PES2UG19CS076_CCLAB_X$ cat *.storage

pes2ug19cs076@PES2UG19CS076:-/Documents/PES2UG19CS076_CCLAB_X$ cat *.storage

["term": 3, "voted_for": "127.0.0.1:8000"}{"term": 73, "voted_for": null}{"term": 6, "voted_for": "127.0.0.1:8002"}pes2ug19cs076@PES2UG19CS076:-/Documents/PES2UG19CS076-CCLAB_X$
```

## 3b)

```
pes2ug19cs076@PES2UG19CS076:~/Documents/PES2UG19CS076_CCLAB_X$ cat *.txt
LEADER => None
LEADER => 127.0.0.1:8000
LEADER IS NOW NODE 1
LEADER => 127.0.0.1:8000
LEADER => 127.0.0.1:8001
LEADER IS NOW NODE 2
LEADER => 127.0.0.1:8000
LEADER => 127.0.0.1:8001
```

```
LEADER => 127.0.0.1:8001
LEADER => 127.0.0.1:8001
LEADER => 127.0.0.1:8001
LEADER => 127.0.0.1:8001
LEADER => None
LEADER => 127.0.0.1:8000
LEADER IS NOW NODE 1
done writing data_id
done writing data_id
LEADER => None
LEADER => 127.0.0.1:8000
LEADER => 127.0.0.1:8000
LEADER => None
LEADER => 127.0.0.1:8002
LEADER => 127.0.0.1:8002
LEADER => None
```

```
LEADER => None

LEADER => None

LEADER => 127.0.0.1:8000

LEADER => None

LEADER => 127.0.0.1:8002

LEADER => 127.0.0.1:8002

LEADER IS NOW NODE 3

done writing data_id

done writing data_id

pes2ug19cs076@PES2UG19CS076:~/Documents/PES2UG19CS076_CCLAB_X$
```