Assignment 3:

Instructions to run the program :

On 4 separate Terminals, execute the below -
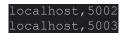
>python myleprocess.py config.txt log.txt
>python myleprocess.py config1.txt log1.txt
>python myleprocess.py config2.txt log2.txt
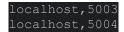>python myleprocess.py config3.txt log3.txt

Config File :

1) config.txt

```
localhost,5001
localhost,5002
```

2) config1.txt

```
localhost,5002
localhost,5003
```

3) config2.txt

```
localhost,5003
localhost,5004
```

4) config3.txt

```
localhost,5004
localhost,5001
```

Terminal Output 1:

Config file name: config.txt
Log file name: log.txt
Host: localhost
Port: 5001
Peer Host: localhost
Peer Port: 5002
Starting server ...
Server started on localhost:5001, waiting for connection...
My UUID 6bb832f7-b588-4367-a9ce-84b093f5457d
Connected to Peer server- localhost : 5002
Connection from ('127.0.0.1', 52126)
----Leader ID elected---- dbd5a110-c7e9-436f-aec0-af22bbe6daa2

Terminal Output 2 :

Config file name: config1.txt
Log file name: log1.txt
Host: localhost
Port: 5002
Peer Host: localhost
Peer Port: 5003
Starting server ...
Server started on localhost:5002, waiting for connection...
Connection from ('127.0.0.1', 52121)
My UUID cd46de25-75be-461b-bab1-bff756b34be7
Connected to Peer server- localhost : 5003
----Leader ID elected---- dbd5a110-c7e9-436f-aec0-af22bbe6daa2

Terminal Output 3 :

Config file name: config2.txt
Log file name: log2.txt
Host: localhost
Port: 5003
Peer Host: localhost
Peer Port: 5004
Starting server ...
Server started on localhost:5003, waiting for connection...
Connection from ('127.0.0.1', 52122)
My UUID 328d6f6b-79ce-466f-a7b0-c9b76e6fe5d1
Connected to Peer server- localhost : 5004
----Leader ID elected---- dbd5a110-c7e9-436f-aec0-af22bbe6daa2

Terminal Output 4:

Config file name: config3.txt
Log file name: log3.txt
Host: localhost
Port: 5004
Peer Host: localhost
Peer Port: 5001
Starting server ...
Server started on localhost:5004, waiting for connection...
Connection from ('127.0.0.1', 52125)
My UUID dbd5a110-c7e9-436f-aec0-af22bbe6daa2
Connected to Peer server- localhost : 5001
----Leader ID elected---- dbd5a110-c7e9-436f-aec0-af22bbe6daa2

Log Output :

    1) log.txt

```
Sent:(MY UUID) uuid=6bb832f7-b588-4367-a9ce-84b093f5457d, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1
 Leader is decided to dbd5a110-c7e9-436f-aec0-af22bbe6daa2
```

2) log1.txt

```
Sent:(MY UUID) uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0
Received: uuid=6bb832f7-b588-4367-a9ce-84b093f5457d, flag=0, less, state=0
Sent: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1
 Leader is decided to dbd5a110-c7e9-436f-aec0-af22bbe6daa2
```

3) log2.txt

```
Sent:(MY UUID) uuid=328d6f6b-79ce-466f-a7b0-c9b76e6fe5d1, flag=0
Received: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0, greater, state=0
Sent: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0
Received: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0, greater, state=0
Sent: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1, greater, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1
 Leader is decided to dbd5a110-c7e9-436f-aec0-af22bbe6daa2
```

4) log4.txt

```
Sent:(MY UUID) uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=328d6f6b-79ce-466f-a7b0-c9b76e6fe5d1, flag=0, less, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0
Received: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0, less, state=0
Received and Ignored: uuid=cd46de25-75be-461b-bab1-bff756b34be7, flag=0, less,
state=0
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=0, same, state=0
Sent: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1
Received: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1, same, state=1self.state
== 1, leader is decided to dbd5a110-c7e9-436f-aec0-af22bbe6daa2
Received and Ignored: uuid=dbd5a110-c7e9-436f-aec0-af22bbe6daa2, flag=1, same,
state=1, leader is decided to dbd5a110-c7e9-436f-aec0-af22bbe6daa2
 Leader is decided to dbd5a110-c7e9-436f-aec0-af22bbe6daa2
```