Distributed Systems Assignment 3 Test Results

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Test 1

```
*** CONFIG LOADED SUCCESSFULLY: ***
{"id": "M1", "role": "PROPOSER", "response Delay": 0, "port": 12345}
{"id":"M2", "role":"PROPOSER", "responseDelay":0, "port":12346}
{"id":"M3", "role":"ACCEPTOR", "responseDelay":0, "port":12347}
{"id": "M4", "role": "ACCEPTOR", "responseDelay": 0, "port": 12348}
 \{"id":"M5","role":"ACCEPTOR","responseDelay":0,"port":12349\} 
[16:20:14] [INFO]
                   [ACCEPTOR M5] Listening on port 12349
[16:20:14]
            [INFO]
                   [ACCEPTOR M4] Listening on port 12348
[16:20:14]
            [INFO]
                   [PROPOSER M1] Listening on port 12345
[16:20:14]
            [INFO]
                   [PROPOSER M2] Listening on port 12346
[16:20:14]
            [INFO]
                   [ACCEPTOR M3] Listening on port 12347
                   [M1]
[16:20:14]
            [INFO]
                        *** Initiating proposal for M1. Sending Broadcast ***
                   [M2]
                        *** Initiating proposal for M2. Sending Broadcast ***
[16:20:14]
            [INFO]
[16:20:14]
            [INFO]
                   [M3]
                        Sent PROMISE to M2
[16:20:14]
            [INFO]
                   [M5]
                        Sent PROMISE to M1
[16:20:14]
            [INFO]
                   [M4]
                        Sent PROMISE to M2
[16:20:14]
                   [M2]
                        *** Majority of Promises Received. Sending Accept Requests ***
            [INFO]
[16:20:14]
            [INFO]
                   [M1]
                        Backoff for 1000ms
[16:20:14]
            [INFO]
                   [M3]
                        Sent ACCEPTED to M2
                        Sent ACCEPTED to M2
[16:20:14]
            [INFO]
                   [M4]
[16:20:14]
            [INFO]
                        Sent ACCEPTED to M2
                   [M5]
                   [M2] *** Consensus Achieved. M2 has been elected. ***
[16:20:14]
            [INFO]
                   [M1] *** Initiating proposal for M1. Sending Broadcast ***
[16:20:15]
           [INFO]
[16:20:15] [INFO] [MAIN] *** ELECTION COMPLETE ***
```

Test 2

```
*** CONFIG LOADED SUCCESSFULLY: ***
{"id":"M1", "role": "PROPOSER", "responseDelay": 0, "port": 12345}
{"id": "M2", "role": "PROPOSER", "responseDelay": 0, "port": 12346}
{"id":"M3", "role":"PROPOSER", "responseDelay":0, "port":12347}
{"id":"M4", "role":"ACCEPTOR", "responseDelay":0, "port":12348}
{"id":"M5", "role":"ACCEPTOR", "responseDelay":0, "port":12349}
{"id": "M6", "role": "ACCEPTOR", "response Delay": 0, "port": 12350}
{"id":"M7", "role":"ACCEPTOR", "responseDelay":0, "port":12351}
{"id": "M8", "role": "ACCEPTOR", "responseDelay": 0, "port": 12352}
{"id": "M9", "role": "ACCEPTOR", "responseDelay": 0, "port": 12353}
                    [PROPOSER M3] Listening on port 12347
[16:18:49]
            [INFO]
[16:18:49]
            [INFO]
                    [PROPOSER M2] Listening on port 12346
[16:18:49]
            [INFO]
                    [ACCEPTOR M8] Listening on port 12352
[16:18:49]
            [INFO]
                    [ACCEPTOR M4]
                                   Listening on port 12348
16:18:49]
            [INFO]
                    [ACCEPTOR M9]
                                    Listening on port 12353
                                    Listening on port 12351
16:18:49]
                    [ACCEPTOR M7]
            [INFO]
16:18:49]
            [INFO]
                    [PROPOSER M1]
                                    Listening on port 12345
16:18:49
            [INFO]
                    [ACCEPTOR M5]
                                    Listening on port 12349
                    [ACCEPTOR M6] Listening on port 12350
16:18:49]
            [INFO]
                    [M3] *** Initiating proposal for M3. Sending Broadcast ***
16:18:49]
            [INFO]
                    [M2] *** Initiating proposal for M2. Sending Broadcast ***
[16:18:49]
            [INFO]
                    [M1] *** Initiating proposal for M1. Sending Broadcast ***
[16:18:49] [INFO]
```

```
[16:18:49]
            [INFO]
                   [M4]
                         Sent PROMISE to M3
                         Sent PROMISE to M2
16:18:49
            [INFO]
                   [M5]
16:18:49
            [INFO]
                         Sent PROMISE to M3
                   [M6]
[16:18:49]
            [INFO]
                   [M7]
                         Sent PROMISE to M3
[16:18:49]
            [INFO]
                   [M8]
                         Sent PROMISE to M2
                         Sent PROMISE to M2
[16:18:49]
            [INFO]
                   [M9]
                         Backoff for 1000ms
[16:18:49]
            [INFO]
                   [M1]
[16:18:50]
            [INFO]
                         *** Initiating proposal for M1. Sending Broadcast ***
                   M1
[16:18:50]
            [INFO]
                   [M4]
                         Sent PROMISE to M1
[16:18:50]
            [INFO]
                   [M5]
                         Sent PROMISE to M1
[16:18:50]
            [INFO]
                   [M7]
                         Sent PROMISE to M1
[16:18:50]
            [INFO]
                   [M6]
                         Sent PROMISE to M1
[16:18:50]
            [INFO]
                   [M8]
                         Sent PROMISE to M1
            [INFO]
                         Sent PROMISE to M1
[16:18:50]
                   [M9]
[16:18:50]
            [INFO]
                   [M1]
                         *** Majority of Promises Received. Sending Accept Requests ***
[16:18:50]
            [INFO]
                   [M4]
                        Sent ACCEPTED to M1
                        Sent ACCEPTED to M1
[16:18:50]
            [INFO]
                   [M5]
                   [M6]
                         Sent ACCEPTED to M1
[16:18:50]
            [INFO]
                   [M7]
[16:18:50]
            [INFO]
                         Sent ACCEPTED to M1
                   [M1]
[16:18:50]
            [INFO]
                         *** Consensus Achieved. M1 has been elected. ***
[16:18:50]
            [INFO]
                        Sent ACCEPTED to M1
                   [M8]
16:18:50]
            [INFO]
                   [M9] Sent ACCEPTED to M1
[16:18:50] [INFO]
                   [MAIN] *** ELECTION COMPLETE ***
```

Test 3

```
*** CONFIG LOADED SUCCESSFULLY: ***
{"id":"M1", "role": "PROPOSER", "responseDelay": 0, "port": 12345}
"id":"M2", "role":"PROPOSER", "responseDelay":500, "port":12346}
{"id":"M3", "role":"PROPOSER", "responseDelay":1000, "port":12347}
{"id":"M4", "role":"ACCEPTOR", "responseDelay":1500, "port":12348}
{"id": "M5", "role": "ACCEPTOR", "responseDelay": 500, "port": 12349}
{"id": "M6", "role": "ACCEPTOR", "responseDelay": 0, "port": 12350}
{"id": "M7", "role": "ACCEPTOR", "responseDelay": 500, "port": 12351}
{"id":"M8", "role":"ACCEPTOR", "responseDelay":0, "port":12352}
{"id":"M9", "role":"ACCEPTOR", "responseDelay":2000, "port":12353}
[16:07:11]
           [INFO]
                    [ACCEPTOR M9] Listening on port 12353
[16:07:11]
            [INFO]
                    [ACCEPTOR M4] Listening on port 12348
            [INFO]
                    [ACCEPTOR M6]
[16:07:11]
                                  Listening on port 12350
                                   Listening on port 12345
[16:07:11]
            [INFO]
                    [PROPOSER M1]
            [INFO]
16:07:11
                    [PROPOSER M3]
                                   Listening on port 12347
[16:07:11]
            [INFO]
                    [ACCEPTOR M5]
                                   Listening on port 12349
[16:07:11]
            [INFO
                    [ACCEPTOR M8]
                                   Listening on port 12352
                    [ACCEPTOR M7]
[16:07:11]
            [INFO
                                   Listening on port 12351
[16:07:11]
            [INFO]
                    [PROPOSER M2] Listening on port 12346
[16:07:11]
            [INFO]
                    [M3]
                        *** Initiating proposal for M3. Sending Broadcast ***
                         *** Initiating proposal for M1. Sending Broadcast ***
[16:07:11]
            [INFO]
                    [M1]
[16:07:11]
                         *** Initiating proposal for M2. Sending Broadcast ***
            [INFO]
                    [M2]
[16:07:11]
            [INFO]
                         Sent PROMISE to M2
                    M8
                         Sent PROMISE to M1
[16:07:11]
            [INFO]
                    [M6]
            [INFO]
                         Sent PROMISE to M1
[16:07:11]
                    [M5]
[16:07:11]
            [INFO]
                    [M7]
                         Sent PROMISE to M2
[16:07:12]
            [INFO]
                    [M4]
                         Sent PROMISE to M2
                         Sent PROMISE to M1
[16:07:13]
            [INFO]
                    [M9]
[16:07:15]
            [INFO]
                         Backoff for 1000ms
[16:07:16]
            [INFO]
                         *** Initiating proposal for M3. Sending Broadcast ***
[16\!:\!07\!:\!16]
            [INFO]
                    [M8]
                         Sent PROMISE to M3
                         Sent PROMISE to M3
[16:07:16]
            [INFO]
                    [M6]
[\,1\,6\,{:}\,0\,7\,{:}\,1\,6\,]
                    [M7]
                         Sent PROMISE to M3
            INFO
                    [M5]
                         Sent PROMISE to M3
[16:07:16]
            [INFO]
[16:07:17]
                    [M4]
                         Sent PROMISE to M3
            [INFO]
16:07:19
            INFO
                    [M9]
                         Sent PROMISE to M3
[16:07:22]
            [INFO]
                    [M3]
                         *** Majority of Promises Received. Sending Accept Requests ***
                         Sent ACCEPTED to M3
[16:07:22]
            INFO
                    [M8]
[16:07:22]
           [INFO]
                    [M6]
                         Sent ACCEPTED to M3
```

```
[16:07:22]
            [INFO]
                    [M5]
                         Sent ACCEPTED to M3
                    [M7]
                         Sent ACCEPTED to M3
 [16:07:22]
            [INFO]
 [16:07:23]
            [INFO]
                    [M4]
                         Sent ACCEPTED to M3
 [16:07:24]
            [INFO]
                    [M9]
                         Sent ACCEPTED to M3
                    [M3] *** Consensus Achieved. M3 has been elected. ***
 [16:07:28]
            [INFO]
[16:07:30] [INFO] [MAIN] *** ELECTION COMPLETE ***
```

Test 4

```
*** CONFIG LOADED SUCCESSFULLY: ***
{"id":"M1","role":"PROPOSER","responseDelay":0,"port":12345}
{"id":"M2","role":"PROPOSER","responseDelay":12345,"port":12346}
{"id":"M3","role":"PROPOSER","responseDelay":12345,"port":12347}
{"id":"M4","role":"ACCEPTOR","responseDelay":1500,"port":12348}
{"id":"M5","role":"ACCEPTOR","responseDelay":500,"port":12349}
{"id":"M6","role":"ACCEPTOR","responseDelay":0,"port":12350}
{"id":"M7", "role":"ACCEPTOR", "responseDelay":500, "port":12351}
{"id":"M8", "role":"ACCEPTOR", "responseDelay":0, "port":12352}
{"id": "M9", "role": "ACCEPTOR", "responseDelay": 2000, "port": 12353}
[16:26:07]
             [INFO]
                      [ACCEPTOR M6] Listening on port 12350
[16:26:07]
              [INFO]
                      [PROPOSER M1] Listening on port 12345
[16:26:07]
              [INFO]
                      [ACCEPTOR M4] Listening on port 12348
                      [PROPOSER M3] Listening on port 12347
[16:26:07]
              [INFO]
              [INFO]
                      [ACCEPTOR M8] Listening on port 12352
[16:26:07]
                      [PROPOSER M2] Listening on port 12346
[16:26:07]
              [INFO]
                      [ACCEPTOR M7] Listening on port 12351
[16:26:07]
              [INFO]
 [16:26:07]
              [INFO]
                      [ACCEPTOR M9] Listening on port 12353
 [16:26:07]
              [INFO]
                      [ACCEPTOR M5] Listening on port 12349
 16:26:07
              [INFO]
                      [M1] *** Initiating proposal for M1. Sending Broadcast ***
                           *** Initiating proposal for M2. Sending Broadcast ***
[16:26:07]
              [INFO]
                      [M2]
                           *** Initiating proposal for M3. Sending Broadcast ***
[16:26:07]
              [INFO]
                      [M3]
 [16:26:07]
              [INFO]
                      [M8]
                            Sent PROMISE to M2
 16:26:07
                            Sent PROMISE to M3
              [INFO]
                      [M6]
                            Sent PROMISE to M2
 [16:26:08]
              [INFO]
                      [M7]
                            Sent PROMISE to M2
 [16:26:08]
              [INFO]
                      [M5]
                      [M4] Sent PROMISE to M3
[16:26:09]
              [INFO]
[16:26:09]
              [INFO]
                      [M1]
                           Backoff for 1000ms
                           Sent PROMISE to M2
[16:26:09]
              [INFO]
                      [M9]
                            *** Initiating proposal for M1. Sending Broadcast ***
[16:26:10]
              [INFO]
                      [M1]
              [INFO]
                            Sent PROMISE to M1
 [16:26:10]
                      [M6]
[16:26:10]
              [INFO]
                      [M8]
                            Sent PROMISE to M1
[16:26:10]
              [INFO]
                      [M5]
                            Sent PROMISE to M1
[16:26:10]
              [INFO]
                      [M7]
                            Sent PROMISE to M1
                      [M1]
                            *** Majority of Promises Received. Sending Accept Requests ***
 [16:26:10]
              [INFO]
                      [M8]
                            Sent ACCEPTED to M1
 [\,1\,6\,{:}\,2\,6\,{:}\,1\,0\,]
              [INFO]
                            Sent ACCEPTED to M1
                      [M6]
 [16:26:10]
              [INFO]
              [INFO]
                      [M5]
                            Sent ACCEPTED to M1
 [16:26:11]
              [INFO]
                      [M7]
                            Sent ACCEPTED to M1
 16:26:11
                      [M1] *** Consensus Achieved. M1 has been elected. ***
 16:26:11
              [INFO]
[16:26:12] [INFO] [MAIN] *** ELECTION COMPLETE ***
```