1 /Library/Java/JavaVirtualMachines/jdk1.8.0 144.jdk/Contents /Home/bin/java -ea -Djava.net.preferIPv4Stack=true -Didea. test.cyclic.buffer.size=1048576 "-javaagent:/Users/rrapaj/ Library/Application Support/JetBrains/Toolbox/apps/IDEA-U/ ch-0/192.7142.36/IntelliJ IDEA.app/Contents/lib/idea rt.jar =49542:/Users/rrapaj/Library/Application Support/JetBrains/ Toolbox/apps/IDEA-U/ch-0/192.7142.36/IntelliJ IDEA.app/ Contents/bin" -Dfile.encoding=UTF-8 -classpath "/Users/ rrapaj/Library/Application Support/JetBrains/Toolbox/apps/ IDEA-U/ch-0/192.7142.36/IntelliJ IDEA.app/Contents/lib/ idea rt.jar:/Users/rrapaj/Library/Application Support/ JetBrains/Toolbox/apps/IDEA-U/ch-0/192.7142.36/IntelliJ IDEA.app/Contents/plugins/junit/lib/junit-rt.jar:/Users/ rrapaj/Library/Application Support/JetBrains/Toolbox/apps/ IDEA-U/ch-0/192.7142.36/IntelliJ IDEA.app/Contents/plugins/ junit/lib/junit5-rt.jar:/Users/rrapaj/.m2/repository/org/ junit/platform/junit-platform-launcher/1.4.2/junit-platform -launcher-1.4.2.jar:/Users/rrapaj/.m2/repository/org/ apiquardian/apiquardian-api/1.0.0/apiquardian-api-1.0.0.jar :/Users/rrapaj/.m2/repository/org/junit/platform/junitplatform-engine/1.4.2/junit-platform-engine-1.4.2.jar:/ Users/rrapaj/.m2/repository/org/opentest4j/opentest4j/1.1.1 /opentest4j-1.1.1.jar:/Users/rrapaj/.m2/repository/org/ junit/platform/junit-platform-commons/1.4.2/junit-platformcommons-1.4.2.jar:/Library/Java/JavaVirtualMachines/jdk1.8. 0_144.jdk/Contents/Home/jre/lib/charsets.jar:/Library/Java/ JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/jre/lib/ deploy.jar:/Library/Java/JavaVirtualMachines/jdk1.8.0 144. jdk/Contents/Home/jre/lib/ext/cldrdata.jar:/Library/Java/ JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/jre/lib/ ext/dnsns.jar:/Library/Java/JavaVirtualMachines/jdk1.8. 0 144.jdk/Contents/Home/jre/lib/ext/jaccess.jar:/Library/ Java/JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/jre /lib/ext/jfxrt.jar:/Library/Java/JavaVirtualMachines/jdk1.8 .0 144.jdk/Contents/Home/jre/lib/ext/localedata.jar:/ Library/Java/JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/ Home/jre/lib/ext/nashorn.jar:/Library/Java/ JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/jre/lib/ ext/sunec.jar:/Library/Java/JavaVirtualMachines/jdk1.8. 0 144.jdk/Contents/Home/jre/lib/ext/sunjce provider.jar:/ Library/Java/JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/ Home/jre/lib/ext/sunpkcs11.jar:/Library/Java/ JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/jre/lib/ ext/zipfs.jar:/Library/Java/JavaVirtualMachines/jdk1.8. 0_144.jdk/Contents/Home/jre/lib/javaws.jar:/Library/Java/ JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/jre/lib/ jce.jar:/Library/Java/JavaVirtualMachines/jdk1.8.0 144.jdk/ Contents/Home/jre/lib/jfr.jar:/Library/Java/ JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/jre/lib/ jfxswt.jar:/Library/Java/JavaVirtualMachines/jdk1.8.0 144.

```
1 jdk/Contents/Home/jre/lib/jsse.jar:/Library/Java/
   JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/jre/lib/
   management-agent.jar:/Library/Java/JavaVirtualMachines/jdk1
   .8.0 144.jdk/Contents/Home/jre/lib/plugin.jar:/Library/Java
   /JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/jre/lib
   /resources.jar:/Library/Java/JavaVirtualMachines/jdk1.8.
   0 144.jdk/Contents/Home/jre/lib/rt.jar:/Library/Java/
   JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/lib/ant-
   javafx.jar:/Library/Java/JavaVirtualMachines/jdk1.8.0_144.
   jdk/Contents/Home/lib/dt.jar:/Library/Java/
   JavaVirtualMachines/jdk1.8.0 144.jdk/Contents/Home/lib/
   javafx-mx.jar:/Library/Java/JavaVirtualMachines/jdk1.8.
   0_144.jdk/Contents/Home/lib/jconsole.jar:/Library/Java/
   JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/lib/
   packager.jar:/Library/Java/JavaVirtualMachines/jdk1.8.0 144
   .jdk/Contents/Home/lib/sa-jdi.jar:/Library/Java/
   JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/lib/
   tools.jar:/Users/rrapaj/Documents/distributed-systems/
   coordinator/out/test/coordinator:/Users/rrapaj/Documents/
   distributed-systems/coordinator/out/production/coordinator
   :/Users/rrapaj/.m2/repository/org/junit/jupiter/junit-
   jupiter/5.4.2/junit-jupiter-5.4.2.jar:/Users/rrapaj/.m2/
   repository/org/junit/jupiter/junit-jupiter-api/5.4.2/junit-
   jupiter-api-5.4.2.jar:/Users/rrapaj/.m2/repository/org/
   junit/jupiter/junit-jupiter-params/5.4.2/junit-jupiter-
   params-5.4.2.jar:/Users/rrapaj/.m2/repository/org/junit/
   jupiter/junit-jupiter-engine/5.4.2/junit-jupiter-engine-5.4
   .2.jar" com.intellij.rt.execution.junit.JUnitStarter -
   ideVersion5 -junit5 @w@/private/var/folders/fc/
   scng93sj423dyx_q_x9_39wm0000gn/T/idea_working_dirs_junit1.
   tmp @/private/var/folders/fc/scng93sj423dyx_q_x9_39wm0000gn
   /T/idea junit1.tmp -socket49541
2 objc[35586]: Class JavaLaunchHelper is implemented in both
    /Library/Java/JavaVirtualMachines/jdk1.8.0_144.jdk/
   Contents/Home/bin/java (0x101a6a4c0) and /Library/Java/
   JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/jre/lib/
   libinstrument.dylib (0x101ae04e0). One of the two will be
   used. Which one is undefined.
3
4
5 Started Node with name: Abigail
6 5149 sending multicast message: COORDINATOR SEARCH Abigail
7 Node Writer active for node: 5149
8
   What do you want to send to the other nodes?: Coordinator
   5149 creating new cluster...
10 I'll be listening for new connections on port: 5149
11
12 Started Node with name: Bertram
13 5119 sending multicast message: COORDINATOR SEARCH Bertram
```

```
14 5149 [Multicast UDP message received] >> COORDINATOR SEARCH
    Bertram
15 5149 sending multicast message: COORDINATOR ME Abigail
16 5119 [Multicast UDP message received] >> COORDINATOR ME
   Abidail
17 Node Writer active for node: 5119
18 Port 5119(Bertram) joining cluster of: 5149(Abigail)
19
20 What do you want to send to the other nodes?: New
   Connection: Socket[addr=/192.168.0.215,port=49546,localport
   =5149]
21 TCPClient connected socket: Socket[addr=arbers-apfel/192.
   168.0.215, port=5149, localport=49546]
22 Socket[addr=/192.168.0.215,port=49546,localport=5149]
23
24 Oh, there is a new connection: Socket[addr=/192.168.0.215,
   port=49546, localport=5149]
25 Me, a TcpListener will listen to (external) 49546 on port (
   internal): 5149
26 Abigail: information was exchanged, I'll listen the right
  way now
27
28 Oh, seems like I - 5119 wanna connect to: 5149
29 Socket[addr=arbers-apfel/192.168.0.215,port=5149,localport=
   49546]
30 Written: HELLOMEISCOORDBOILOOKHOWMNYNDSIHV 0
31 I'll be listening for new connections on port: 5149
32
33
34
35
36 Okay, all of the nodes are active, let's send a message
37 Me, a TcpListener will listen to (external) 5149 on port (
   internal): 49546
38 Bertram: information was exchanged, I'll listen the right
  way now
39
40
41
42
43 Go: 2019-12-30 23:36:07.207
44 5149 sending multicast message: NEWMSG 0$Abigail$2019-12-30
    23:36:07.207$Nachricht #1 von Abigail(Koordinator)
45 That's a new message, Index: 0; My WriteIndex: -1
46 handleNewMessage-Participant
47 It's the next message according to the write index, so let'
   s write it down
48 5119 [Multicast UDP message received] >> NEWMSG
   0$Abigail$2019-12-30 23:36:07.207$Nachricht #1 von Abigail(
   Koordinator)
```

```
49 That's a new message, Index: 0; My WriteIndex: −1
50 handleNewMessage-Participant
51 It's the next message according to the write index, so let'
   s write it down
52 Bertram: nextLine from readLine() =
  HELLOMEISCOORDBOILOOKHOWMNYNDSIHV 0
53 TcpListener: 5119 : HELLOMEISCOORDBOILOOKHOWMNYNDSIHV 0
54 Written to file: 2019-12-30 23:36:07.209
55 Written to file: 2019-12-30 23:36:07.209
56 Written: WANNASNDMSG Bertram$Nachricht #2 von Betram
57 Written: WANNASNDMSG Bertram$Nachricht #3 von Bertram
58 Abigail: nextLine from readLine() = WANNASNDMSG
   Bertram$Nachricht #2 von Betram
59 TcpListener: 5149 : WANNASNDMSG Bertram$Nachricht #2 von
   Betram
60 Coordinator action on WANNASNDMSG Bertram$Nachricht #2 von
   Betram
61 Bertram$Nachricht #2 von Betram/49546/
62 Abigail: writer is null for sendMessageTo
63 Abigail: nextLine from readLine() = WANNASNDMSG
   Bertram$Nachricht #3 von Bertram
64 TcpListener: 5149 : WANNASNDMSG Bertram$Nachricht #3 von
   Bertram
65 Coordinator action on WANNASNDMSG Bertram$Nachricht #3 von
   Bertram
66 Bertram$Nachricht #3 von Bertram/49546/
67 Abigail: writer is null for sendMessageTo
68
69
70 Process finished with exit code 0
71
```