```
1 "C:\Program Files\Java\jdk-19\bin\java.exe" "-
   javaagent:C:\Program Files\JetBrains\IntelliJ IDEA
   Community Edition 2024.1.2\lib\idea_rt.jar=44524:C:\
   Program Files\JetBrains\IntelliJ IDEA Community
   Edition 2024.1.2\bin" -Dfile.encoding=UTF-8 -Dsun.
   stdout.encoding=UTF-8 -Dsun.stderr.encoding=UTF-8 -
   classpath "F:\Masters in Computer and Information
   Science\CSMC\Projects\RicartAgarwalaUsingThread\out\
   production\RicartAgarwalaUsingThread" Main
2 Received Message [ None ] :: Name: C Received Message
   : No message to receive
 3 Received Message [ None ] :: Name: E Received Message
   : No message to receive
 4 Request Message :: Name: B id: 2 status: Requesting
   message sent: B:2:REQUEST:0 to: A at: 0
 5 Request Message :: Name: F id: 6 status: Requesting
   message sent: F:6:REQUEST:0 to: A at: 0
 6 Request Message :: Name: B id: 2 status: Requesting
   message sent: B:2:REQUEST:0 to: C at: 0
 7 Request Message :: Name: F id: 6 status: Requesting
   message sent: F:6:REQUEST:0 to: B at: 0
 8 Request Message :: Name: B id: 2 status: Requesting
   message sent: B:2:REQUEST:0 to: D at: 0
 9 Request Message :: Name: F id: 6 status: Requesting
   message sent: F:6:REQUEST:0 to: C at: 0
10 Request Message :: Name: B id: 2 status: Requesting
   message sent: B:2:REQUEST:0 to: E at: 0
11 Request Message :: Name: F id: 6 status: Requesting
   message sent: F:6:REQUEST:0 to: D at: 0
12 Request Message :: Name: B id: 2 status: Requesting
   message sent: B:2:REQUEST:0 to: F at: 0
13 Request Message :: Name: A id: 1 status: Requesting
   message sent: A:1:REQUEST:0 to: B at: 0
14 Request Message :: Name: A id: 1 status: Requesting
   message sent: A:1:REQUEST:0 to: C at: 0
15 Request Message :: Name: A id: 1 status: Requesting
   message sent: A:1:REQUEST:0 to: D at: 0
16 Request Message :: Name: D id: 4 status: Requesting
   message sent: D:4:REQUEST:0 to: A at: 0
17 Request Message :: Name: F id: 6 status: Requesting
   message sent: F:6:REQUEST:0 to: E at: 0
```

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18 Request Message :: Name: A id: 1 status: Requesting
   message sent: A:1:REQUEST:0 to: E at: 0
19 Request Message :: Name: A id: 1 status: Requesting
   message sent: A:1:REQUEST:0 to: F at: 0
20 Request Message :: Name: D id: 4 status: Requesting
   message sent: D:4:REQUEST:0 to: B at: 0
21 Request Message :: Name: D id: 4 status: Requesting
   message sent: D:4:REQUEST:0 to: C at: 0
22 Request Message :: Name: D id: 4 status: Requesting
   message sent: D:4:REQUEST:0 to: E at: 0
23 Request Message :: Name: D id: 4 status: Requesting
   message sent: D:4:REQUEST:0 to: F at: 0
24 Received Message[ Requesting ]:: Name: B Received
   Message: A:1:REQUEST:0 Received from : A
25
26 Received Message[ Requesting ]:: Name: A Received
   Message: D:4:REQUEST:0 Received from : D
27 Received Message[ Requesting ]:: Name: D Received
   Message: B:2:REQUEST:0 Received from : B
28
29 Received Message[ Requesting ]:: Name: F Received
   Message: B:2:REQUEST:0 Received from : B
30
31 Send Message :: Name: B id: 2 status: Requesting
   message sent: B:2:GO_AHEAD:1 to: A at: 1
32
33 Send Message :: Name: F id: 6 status: Requesting
   message sent: F:6:GO_AHEAD:1 to: B at: 1
34 Send Message :: Name: D id: 4 status: Requesting
   message sent: D:4:GO_AHEAD:1 to: B at: 1
35 Received Message[ None ]:: Name: C Received Message:
   B:2:REQUEST:0 Received from : B
36
37 Request Message :: Name: E id: 5 status: Requesting
   message sent: E:5:REQUEST:0 to: A at: 0
38 Send Message :: Name: C id: 3 status: None message
   sent: C:3:GO_AHEAD:1 to: B at: 1
39 Request Message :: Name: E id: 5 status: Requesting
   message sent: E:5:REQUEST:0 to: B at: 0
40 Request Message :: Name: E id: 5 status: Requesting
   message sent: E:5:REQUEST:0 to: C at: 0
```

```
41 Request Message :: Name: E id: 5 status: Requesting
   message sent: E:5:REQUEST:0 to: D at: 0
42 Request Message :: Name: E id: 5 status: Requesting
   message sent: E:5:REQUEST:0 to: F at: 0
43 Received Message[ Requesting ]:: Name: E Received
   Message: B:2:REQUEST:0 Received from : B
44
45 Send Message :: Name: E id: 5 status: Requesting
   message sent: E:5:GO_AHEAD:1 to: B at: 1
46 Received Message[ Requesting ]:: Name: B Received
   Message: F:6:REQUEST:0 Received from : F
47
48 Received Message[ Requesting ]:: Name: F Received
   Message: A:1:REQUEST:0 Received from : A
49
50 Received Message[ Requesting ]:: Name: A Received
   Message: F:6:REQUEST:0 Received from : F
51
52 Received Message[ Requesting ]:: Name: D Received
   Message: F:6:REQUEST:0 Received from : F
53
54 Send Message :: Name: F id: 6 status: Requesting
   message sent: F:6:GO_AHEAD:3 to: A at: 3
55 Request Message :: Name: C id: 3 status: Requesting
   message sent: C:3:REQUEST:2 to: A at: 2
56 Request Message :: Name: C id: 3 status: Requesting
   message sent: C:3:REQUEST:2 to: B at: 2
57 Received Message[ Requesting ]:: Name: E Received
   Message: F:6:REQUEST:0 Received from : F
58
59 Request Message :: Name: C id: 3 status: Requesting
   message sent: C:3:REQUEST:2 to: D at: 2
60 Request Message :: Name: C id: 3 status: Requesting
   message sent: C:3:REQUEST:2 to: E at: 2
61 Request Message :: Name: C id: 3 status: Requesting
   message sent: C:3:REQUEST:2 to: F at: 2
62 Received Message[ Requesting ]:: Name: C Received
   Message: F:6:REQUEST:0 Received from : F
63
64 Send Message :: Name: C id: 3 status: Requesting
   message sent: C:3:GO_AHEAD:3 to: F at: 3
```

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65 Received Message[ Requesting ]:: Name: D Received
   Message: A:1:REQUEST:0 Received from : A
66
67 Received Message[ Requesting ]:: Name: F Received
   Message: D:4:REQUEST:0 Received from : D
68
69 Received Message[ Requesting ]:: Name: A Received
   Message: B:2:REQUEST:0 Received from : B
70
71 Received Message[ Requesting ]:: Name: B Received
   Message: D:4:REQUEST:0 Received from : D
72
73 Send Message :: Name: D id: 4 status: Requesting
   message sent: D:4:GO_AHEAD:4 to: A at: 4
74 Send Message :: Name: F id: 6 status: Requesting
   message sent: F:6:GO_AHEAD:5 to: D at: 5
75 Received Message[ Requesting ]:: Name: E Received
   Message: A:1:REQUEST:0 Received from : A
76
77 Received Message[ Requesting ]:: Name: C Received
   Message: A:1:REQUEST:0 Received from : A
78
79 Send Message :: Name: C id: 3 status: Requesting
   message sent: C:3:GO_AHEAD:5 to: A at: 5
80 Send Message :: Name: E id: 5 status: Requesting
   message sent: E:5:GO_AHEAD:4 to: A at: 4
81 Received Message[ Requesting ]:: Name: B Received
   Message: D:4:GO_AHEAD:1 Received from : D
82
83 Received Message[ Requesting ]:: Name: A Received
   Message: B:2:GO_AHEAD:1 Received from : B
84
85 Received Message[ Requesting ]:: Name: D Received
   Message: E:5:REQUEST:0 Received from : E
86
87 Received Message[ Requesting ]:: Name: F Received
   Message: E:5:REQUEST:0 Received from : E
88
89 Send Message :: Name: F id: 6 status: Requesting
   message sent: F:6:GO_AHEAD:7 to: E at: 7
90 Received Message[ Requesting ]:: Name: C Received
```

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90 Message: D:4:REQUEST:0 Received from : D
 91
 92 Received Message[ Requesting ]:: Name: E Received
    Message: D:4:REQUEST:0 Received from : D
 93
 94 Send Message :: Name: C id: 3 status: Requesting
    message sent: C:3:GO_AHEAD:7 to: D at: 7
 95 Send Message :: Name: E id: 5 status: Requesting
    message sent: E:5:GO_AHEAD:6 to: D at: 6
 96 Received Message[ Requesting ]:: Name: D Received
    Message: C:3:REQUEST:2 Received from : C
 97
 98 Received Message[ Requesting ]:: Name: A Received
    Message: E:5:REQUEST:0 Received from : E
 99
100 Received Message[ Requesting ]:: Name: B Received
    Message: F:6:GO_AHEAD:1 Received from : F
101
102 Received Message[ Requesting ]:: Name: F Received
    Message: C:3:REQUEST:2 Received from : C
103
104 Received Message[ Requesting ]:: Name: E Received
    Message: C:3:REQUEST:2 Received from : C
105
106 Received Message[ Requesting ]:: Name: C Received
    Message: E:5:REQUEST:0 Received from : E
107
108 Send Message :: Name: C id: 3 status: Requesting
    message sent: C:3:GO_AHEAD:9 to: E at: 9
109 Received Message[ Requesting ]:: Name: A Received
    Message: F:6:GO_AHEAD:3 Received from : F
110 Received Message[ Requesting ]:: Name: F Received
    Message: C:3:GO_AHEAD:3 Received from : C
111
112 Received Message[ Requesting ]:: Name: D Received
    Message: F:6:GO_AHEAD:5 Received from : F
113
114 Received Message[ Requesting ]:: Name: B Received
    Message: C:3:GO_AHEAD:1 Received from : C
115
116
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117 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
118 Received Message[ Requesting ]:: Name: E Received
    Message: F:6:GO_AHEAD:7 Received from : F
119
120 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
121 Received Message[ Requesting ]:: Name: A Received
    Message: C:3:REQUEST:2 Received from : C
122
123 Received Message[ Requesting ]:: Name: B Received
    Message: E:5:REQUEST:0 Received from : E
124
125 Received Message[ Requesting ]:: Name: D Received
    Message: C:3:GO_AHEAD:7 Received from : C
126
127 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
128 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
129 Received Message[ Requesting ]:: Name: E Received
    Message: C:3:GO_AHEAD:9 Received from : C
130
131 Received Message[ Requesting ]:: Name: A Received
    Message: D:4:GO_AHEAD:4 Received from : D
132
133 Received Message[ Requesting ]:: Name: B Received
    Message: E:5:GO_AHEAD:1 Received from : E
134
135 Received Message[ Requesting ]:: Name: D Received
    Message: E:5:GO_AHEAD:6 Received from : E
136
137 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
138 Received Message[ Requesting ]:: Name: B Received
    Message: C:3:REQUEST:2 Received from : C
139
140 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
141 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
```

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142 Received Message[ Requesting ]:: Name: A Received
    Message: E:5:GO_AHEAD:4 Received from : E
143
144 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
145 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
146 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
147 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
148 Received Message [ Requesting ] :: Name: B Received
    Message: No message to receive
149 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
150 Received Message[ Requesting ]:: Name: A Received
   Message: C:3:GO_AHEAD:5 Received from : C
151
152 A is in Critical State
153 Received Message [ Requesting ] :: Name: B Received
    Message: No message to receive
154 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
155 Received Message [ InCriticalState ] :: Name: A
    Received Message: No message to receive
156 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
157 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
158 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
159 Received Message [ Requesting ] :: Name: B Received
    Message: No message to receive
160 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
161 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
162 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
163 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
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164 Received Message [ InCriticalState ] :: Name: A
    Received Message: No message to receive
165 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
166 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
167 Received Message [ Requesting ] :: Name: B Received
    Message: No message to receive
168 Received Message [ InCriticalState ] :: Name: A
    Received Message: No message to receive
169 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
170 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
171 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
172 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
173 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
174 Received Message [ AfterCriticalState ] :: Name: A
    Received Message: No message to receive
175 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
176 A exiting critical state.
177 Received Message [ Requesting ] :: Name: B Received
    Message: No message to receive
178 Send Message :: Name: A id: 1 status:
    AfterCriticalState message sent: A:1:GO_AHEAD:15 to
    : D at: 15
179 Send Message :: Name: A id: 1 status:
    AfterCriticalState message sent: A:1:GO_AHEAD:16 to
    : F at: 16
180 Send Message :: Name: A id: 1 status:
    AfterCriticalState message sent: A:1:GO_AHEAD:17 to
    : B at: 17
181 Send Message :: Name: A id: 1 status:
    AfterCriticalState message sent: A:1:GO_AHEAD:18 to
    : E at: 18
182 Send Message :: Name: A id: 1 status:
    AfterCriticalState message sent: A:1:GO_AHEAD:19 to
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182 : C at: 19
183 Received Message[ Requesting ]:: Name: D Received
    Message: A:1:GO_AHEAD:15 Received from : A
184
185 Received Message[ Requesting ]:: Name: B Received
    Message: A:1:GO_AHEAD:17 Received from : A
186
187 B is in Critical State
188 Received Message[ Requesting ]:: Name: C Received
    Message: A:1:GO_AHEAD:19 Received from : A
189
190 Received Message[ Requesting ]:: Name: E Received
    Message: A:1:GO_AHEAD:18 Received from : A
191
192 Received Message[ Requesting ]:: Name: F Received
    Message: A:1:GO_AHEAD:16 Received from : A
193
194 Received Message [ AfterCriticalState ] :: Name: A
    Received Message: No message to receive
195 Received Message [ Requesting ] :: Name: F Received
    Message: No message to receive
196 Received Message [ AfterCriticalState ] :: Name: A
    Received Message: No message to receive
197 Received Message [ InCriticalState ] :: Name: B
    Received Message: No message to receive
198 Received Message [ Requesting ] :: Name: E Received
    Message: No message to receive
199 Received Message [ Requesting ] :: Name: D Received
    Message: No message to receive
200 Received Message [ Requesting ] :: Name: C Received
    Message: No message to receive
201
202 Process finished with exit code 130
203
```