"C:\Program Files\Java\jdk-22\bin\java.exe" "-javaagent:C:\Users\
USER\AppData\Local\JetBrains\IntelliJ IDEA Community Edition 2024
.1.3\lib\idea_rt.jar=50707:C:\Users\USER\AppData\Local\JetBrains\
IntelliJ IDEA Community Edition 2024.1.3\bin" -Dfile.encoding=UTF
-8 -Dsun.stdout.encoding=UTF-8 -Dsun.stderr.encoding=UTF-8 -
classpath D:\M.Sc_2nd_Sem\AOS\Assignment4\out\production\
Assignment4 Main

Print Stack Updates
New Node(leaf) pushed : name : D id: 1
New Node(leaf) pushed : name : E id: 2
New Node(leaf) pushed : name : F id: 3
child Popped: name : F id: 3 parentid: 4
child Popped: name : E id: 2 parentid: 4
child Popped: name : D id: 1 parentid: 4
New Node(internal) pushed : name : B id: 4
New Node(leaf) pushed : name : G id: 5
New Node(leaf) pushed : name : H id: 6
child Popped: name : H id: 6 parentid: 7
child Popped: name : G id: 5 parentid: 7
New Node(internal) pushed : name : C id: 7
child Popped: name : C id: 7 parentid: 8
child Popped: name : B id: 4 parentid: 8
New Node(internal) pushed : name : A id: 8
root Popped: name :A id: 8 parent Id: 0


System Log::
Information Message :: Node A with ID 8 have been set to PHOLD
Initially.
Request Message :: Node H [ REQUESTING ] with ID 6 is requesting
token from C
Request Message :: Node C [ NONE ] with ID 7 is requesting token
from A
Send Message :: Node A [ PHOLD ] with ID 8 is sending token to C
Information Message :: Node C with ID 7 is now parent of  A
Send Message :: Node C [ PHOLD ] with ID 7 is sending token to H
Information Message :: Node H with ID 6 is now parent of  C
Information Message :: Node H with ID 6 is in critical state
Request Message :: Node G [ REQUESTING ] with ID 5 is requesting
token from C

Request Message :: Node C [ NONE ] with ID 7 is requesting token from H

Request Message :: Node D [ REQUESTING ] with ID 1 is requesting token from B

Request Message :: Node B [ NONE ] with ID 4 is requesting token from A

Request Message :: Node A [ NONE ] with ID 8 is requesting token from C

Send Message :: Node H [ PHOLD ] with ID 6 is sending token to C

Information Message :: Node C with ID 7 is now parent of  H

Send Message :: Node C [ PHOLD ] with ID 7 is sending token to G

Information Message :: Node G with ID 5 is now parent of  C

Information Message :: Node G with ID 5 is in critical state

Request Message :: Node C [ REQUESTING ] with ID 7 is requesting token back from G to send A

Send Message :: Node G [ PHOLD ] with ID 5 is sending token to C

Information Message :: Node C with ID 7 is now parent of  G

Send Message :: Node C [ PHOLD ] with ID 7 is sending token to A

Information Message :: Node A with ID 8 is now parent of  C

Send Message :: Node A [ PHOLD ] with ID 8 is sending token to B

Termination Message :: Node E with ID: 2 has been terminated due to an empty request queue.

Termination Message :: Node F with ID: 3 has been terminated due to an empty request queue.

Information Message :: Node B with ID 4 is now parent of  A

Send Message :: Node B [ PHOLD ] with ID 4 is sending token to D

Information Message :: Node D with ID 1 is now parent of  B

Information Message :: Node D with ID 1 is in critical state

Request Message :: Node A [ REQUESTING ] with ID 8 is requesting token from B

Request Message :: Node B [ NONE ] with ID 4 is requesting token from D

Request Message :: Node C [ REQUESTING ] with ID 7 is requesting token from A

Send Message :: Node D [ PHOLD ] with ID 1 is sending token to B

Information Message :: Node B with ID 4 is now parent of  D

Send Message :: Node B [ PHOLD ] with ID 4 is sending token to A

Information Message :: Node A with ID 8 is now parent of  B

Information Message :: Node A with ID 8 is in critical state

Request Message :: Node D [ REQUESTING ] with ID 1 is requesting token from B

Request Message :: Node B [ NONE ] with ID 4 is requesting token from A

Termination Message :: Node H with ID: 6 has been terminated due to an empty request queue.

Send Message :: Node A [ PHOLD ] with ID 8 is sending token to C

Information Message :: Node C with ID 7 is now parent of  A

Request Message :: Node A [ REQUESTING ] with ID 8 is requesting token back from C to send B

Information Message :: Node C with ID 7 is in critical state

Termination Message :: Node G with ID: 5 has been terminated due to an empty request queue.

Send Message :: Node C [ PHOLD ] with ID 7 is sending token to A

Information Message :: Node A with ID 8 is now parent of  C

Send Message :: Node A [ PHOLD ] with ID 8 is sending token to B

Information Message :: Node B with ID 4 is now parent of  A

Send Message :: Node B [ PHOLD ] with ID 4 is sending token to D

Information Message :: Node D with ID 1 is now parent of  B

Information Message :: Node D with ID 1 is in critical state

Request Message :: Node C [ REQUESTING ] with ID 7 is requesting token from A

Request Message :: Node A [ NONE ] with ID 8 is requesting token from B

Request Message :: Node B [ NONE ] with ID 4 is requesting token from D

Send Message :: Node D [ PHOLD ] with ID 1 is sending token to B

Information Message :: Node B with ID 4 is now parent of  D

Send Message :: Node B [ PHOLD ] with ID 4 is sending token to A

Information Message :: Node A with ID 8 is now parent of  B

Send Message :: Node A [ PHOLD ] with ID 8 is sending token to C

Information Message :: Node C with ID 7 is now parent of  A

Information Message :: Node C with ID 7 is in critical state

Request Message :: Node A [ REQUESTING ] with ID 8 is requesting token from C

Request Message :: Node B [ REQUESTING ] with ID 4 is requesting token from A

Send Message :: Node C [ PHOLD ] with ID 7 is sending token to A

Information Message :: Node A with ID 8 is now parent of  C

Information Message :: Node A with ID 8 is in critical state

Request Message :: Node D [ REQUESTING ] with ID 1 is requesting token from B

Send Message :: Node A [ PHOLD ] with ID 8 is sending token to B

Information Message :: Node B with ID 4 is now parent of  A
Information Message :: Node B with ID 4 is in critical state
Termination Message :: Node C with ID: 7 has been terminated due
to an empty request queue.
Send Message :: Node B [ PHOLD ] with ID 4 is sending token to D
Information Message :: Node D with ID 1 is now parent of  B
Information Message :: Node D with ID 1 is in critical state
Request Message :: Node B [ REQUESTING ] with ID 4 is requesting
token from D
Send Message :: Node D [ PHOLD ] with ID 1 is sending token to B
Information Message :: Node B with ID 4 is now parent of  D
Information Message :: Node B with ID 4 is in critical state
Termination Message :: Node D with ID: 1 has been terminated due
to an empty request queue.
Termination Message :: Node A with ID: 8 has been terminated due
to an empty request queue.
Termination Message :: Node B with ID: 4 has been terminated due
to an empty request queue.

All system processes have finished.

Final Inverted tree is :
B
   D
   E
   F
   A
     C
       G
       H


Process finished with exit code 0