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CSCI 4404
Assignment 3

Output for both input1.txt and input2.txt:

```
luna@luna-Blade: ~/Documents/CSCI_4401_OS/HW4

File  Edit  View  Search  Terminal  Help
Process 1 released resource 1 - Resource 1 is now free
Process 5p claimed resource 1 - Process 5p is no longer in queue
Process 3 wants resouce 3 - Process 3 must wait
Process 5 released resource 1 - Resource 1 is now free
Resource 1 currently has no queued process
Process 4 wants resouce 2 - Process 4 must wait
Deadlock detected: processes 2, 3, 4, and resources 2, 6, 3, found in cycle.
luna@luna-Blade:~/Documents/CSCI_4401_OS/HW4$ python DeadlockDetection1.py
Not enough arguments provided.
luna@luna-Blade:~/Documents/CSCI_4401_OS/HW4$ python DeadlockDetection1.py
Not enough arguments provided.
luna@luna-Blade:~/Documents/CSCI_4401_OS/HW4$ python DeadlockDetection1.py input2.txt
File Name: input2.txt
Total Steps: 13

Process 1 wants resouce 1 - Resource 1 is allocated to process 1
Process 2 wants resouce 2 - Resource 2 is allocated to process 2
Process 3 wants resouce 6 - Resource 6 is allocated to process 3
Process 2 wants resouce 6 - Process 2 must wait
Process 4 wants resouce 3 - Resource 3 is allocated to process 4
Process 5 wants resouce 1 - Process 5 must wait
Process 1 released resource 1 - Resource 1 is now free
Process 5p claimed resource 1 - Process 5p is no longer in queue
Process 3 wants resouce 3 - Process 3 must wait
Process 5 released resource 1 - Resource 1 is now free
Resource 1 currently has no queued process
Process 4 wants resouce 2 - Process 4 must wait
Deadlock detected: processes 2, 3, 4, and resources 2, 6, 3, found in cycle.
luna@luna-Blade:~/Documents/CSCI_4401_OS/HW4$ python DeadlockDetection1.py input1.txt
File Name: input1.txt
Total Steps: 15

Process 1 wants resouce 1 - Resource 1 is allocated to process 1
Process 2 wants resouce 2 - Resource 2 is allocated to process 2
Process 3 wants resouce 6 - Resource 6 is allocated to process 3
Process 2 wants resouce 6 - Process 2 must wait
Process 4 wants resouce 3 - Resource 3 is allocated to process 4
Process 5 wants resouce 1 - Process 5 must wait
Process 1 released resource 1 - Resource 1 is now free
Process 5p claimed resource 1 - Process 5p is no longer in queue
Process 3 wants resouce 3 - Process 3 must wait
Process 5 released resource 1 - Resource 1 is now free
Resource 1 currently has no queued process
Process 4 released resource 3 - Resource 3 is now free
Process 3p claimed resource 3 - Process 3p is no longer in queue
Process 4 wants resouce 2 - Process 4 must wait
Process 3 released resource 6 - Resource 6 is now free
Process 2p claimed resource 6 - Process 2p is no longer in queue
Process 1 wants resouce 4 - Resource 4 is allocated to process 1
Process 1 wants resouce 5 - Resource 5 is allocated to process 1
Process 1 released resource 4 - Resource 4 is now free
Execution completed: No deadlock detected.
luna@luna-Blade:~/Documents/CSCI_4401_OS/HW4$ ▯
```

To run the program:

Open a command line a folder containing the program and input files.
Input command:

python DeadlockDetection1.py <inputfile>

Ex:

Python DeadlockDetection1.py input1.txt