

OpenSSH SSH client

```
ya1220@edge39:consumer_producer$ ./main 1 1 1 1
Entered: consumers = 1 | producers = 1 | queue_size = 1 | number_of_jobs_for_each_producer = 1
..Created all consumer threads..
Starting consumer thread = 0..Created all producer threads..

Started producer thread = 0
Producer(0) about to go to sleep for 4 seconds..
Producer(0) woke up..
Producer(0): Job id 0..current number of jobs in buffer = 0
Producer(0): Job id 0 sleeping for 4 and produced job with duration = 7
Consumer(0): Job id 0 grabbed item..about to consume for t = 7..items left in queue = 0
Consumer(0): Job id 0 consumption done..
Consumer(0): Job id 0 timed out waiting..exiting thread..

Joined all threads....cleanup starts....exiting..
ya1220@edge39:consumer_producer$
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OpenSSH SSH client
ya1220@edge39:consumer_producer$
ya1220@edge39:consumer_producer$ ./main 1 2 2 2
Entered: consumers = 2 | producers = 2 | queue_size = 1 | number_of_jobs_for_each_producer = 2
..Created all consumer threads..
Starting consumer thread = 1
Started producer thread = ..Created all producer threads..

0

Starting consumer thread = 0

Started producer thread = 1
Producer(1) about to go to sleep for 4 seconds..
Producer(0) about to go to sleep for 3 seconds..
Producer(0) woke up..
Producer(0): Job id 0..current number of jobs in buffer = 0
Producer(0): Job id 0 sleeping for 3 and produced job with duration = 6
Producer(0) about to go to sleep for 4 seconds..
Consumer(1): Job id 0 grabbed item..about to consume for t = 6..items left in queue = 0
Producer(1) woke up..
Producer(1): Job id 0..current number of jobs in buffer = 0
Producer(1): Job id 0 sleeping for 4 and produced job with duration = 7
Producer(1) about to go to sleep for 2 seconds..
Consumer(0): Job id 0 grabbed item..about to consume for t = 7..items left in queue = 0
Producer(1) woke up..
Producer(1): Job id 1..current number of jobs in buffer = 0
Producer(1): Job id 1 sleeping for 2 and produced job with duration = 3
Producer(0) woke up..
Producer(0): Job id 1..current number of jobs in buffer = 1
Consumer(1): Job id 0 consumption done..
Consumer(1): Job id 1 grabbed item..about to consume for t = 3..items left in queue = 0
Producer(0): Job id 1 sleeping for 4 and produced job with duration = 6
Consumer(0): Job id 0 consumption done..
Consumer(0): Job id 1 grabbed item..about to consume for t = 6..items left in queue = 0
Consumer(1): Job id 1 consumption done..
Consumer(0): Job id 1 consumption done..
Consumer(1): Job id 1 timed out waiting..exiting thread..
Consumer(0): Job id 1 timed out waiting..exiting thread..

Joined all threads....cleanup starts....exiting..
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```
Starting consumer thread = 0
Starting consumer thread = ..Created all consumer threads..1
Started producer thread = 0
..Created all producer threads..

Producer(0) about to go to sleep for 4 seconds..

Started producer thread = 1
Producer(1) about to go to sleep for 3 seconds..
Producer(1) woke up..
Producer(1): Job id 0..current number of jobs in buffer = 0
Producer(1): Job id 0 sleeping for 3 and produced job with duration = 6
Producer(1) about to go to sleep for 4 seconds..
Consumer(0): Job id 0 grabbed item..about to consume for t = 6..items left in queue = 0
Producer(0) woke up..
Producer(0): Job id 0..current number of jobs in buffer = 0
Producer(0): Job id 0 sleeping for 4 and produced job with duration = 7
Producer(0) about to go to sleep for 2 seconds..
Consumer(1): Job id 0 grabbed item..about to consume for t = 7..items left in queue = 0
Producer(0) woke up..
Producer(0): Job id 1..current number of jobs in buffer = 0
Producer(0): Job id 1 sleeping for 2 and produced job with duration = 3
Producer(1) woke up..
Producer(1): Job id 1..current number of jobs in buffer = 1
Producer(1): Job id 1 sleeping for 4 and produced job with duration = 6
Consumer(0): Job id 0 consumption done..
Consumer(0): Job id 1 grabbed item..about to consume for t = 3..items left in queue = 1
Consumer(1): Job id 0 consumption done..
Consumer(1): Job id 1 grabbed item..about to consume for t = 6..items left in queue = 0
Consumer(0): Job id 1 consumption done..
Consumer(1): Job id 1 consumption done..
Consumer(0): Job id 1 timed out waiting..exiting thread..
Consumer(1): Job id 1 timed out waiting..exiting thread..

Joined all threads....cleanup starts....exiting..
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```



```
OpenSSH SSH client
ya1220@edge39:consumer_producer$ ./main 3 3 3 3
Entered: consumers = 3 | producers = 3 | queue_size = 3 | number_of_jobs_for_each_producer = 3

Starting consumer thread = 0
Starting consumer thread = 1
..Created all consumer threads..
Starting consumer thread = 2

Started producer thread = 0
Producer(0) about to go to sleep for 4 seconds..
..Created all producer threads..

Started producer thread =
Started producer thread = 2
Producer(2) about to go to sleep for 3 seconds..
1
Producer(1) about to go to sleep for 4 seconds..
Producer(2) woke up..
Producer(2): Job id 0..current number of jobs in buffer = 0
Producer(2): Job id 0 sleeping for 3 and produced job with duration = 6
Producer(2) about to go to sleep for 2 seconds..
Consumer(0): Job id 0 grabbed item..about to consume for t = 6..items left in queue = 0
Producer(0) woke up..
Producer(0): Job id 0..current number of jobs in buffer = 0
Producer(0): Job id 0 sleeping for 4 and produced job with duration = 7
Producer(0) about to go to sleep for 5 seconds..
Consumer(1): Job id 0 grabbed item..about to consume for t = 7..items left in queue = 0
Producer(1) woke up..
Producer(1): Job id 0..current number of jobs in buffer = 0
Producer(1): Job id 0 sleeping for 4 and produced job with duration = 6
Producer(1) about to go to sleep for 3 seconds..
Consumer(2): Job id 0 grabbed item..about to consume for t = 6..items left in queue = 0
Producer(2) woke up..
Producer(2): Job id 1..current number of jobs in buffer = 0
Producer(2): Job id 1 sleeping for 2 and produced job with duration = 3
Producer(2) about to go to sleep for 1 seconds..
Producer(2) woke up..
Producer(2): Job id 2..current number of jobs in buffer = 1
Producer(2): Job id 2 sleeping for 1 and produced job with duration = 10
Producer(1) woke up..
Producer(1): Job id 1..current number of jobs in buffer = 2
Producer(1): Job id 1 sleeping for 3 and produced job with duration = 8
Producer(1) about to go to sleep for 4 seconds..
Producer(0) woke up..
Consumer(0)Producer(0): Job id ): Job id 0 consumption done..1
Consumer(0): Job id 1 grabbed item..about to consume for t = ..current number of jobs in buffer = 33
..items left in queue = 2
Producer(0): Job id 1 sleeping for 5 and produced job with duration = 2
Producer(0) about to go to sleep for 1 seconds..
Consumer(2): Job id 0 consumption done..
Consumer(2): Job id 2 grabbed item..about to consume for t = 10..items left in queue = 2
Producer(0) woke up..
Producer(0): Job id 2..current number of jobs in buffer = 2
Producer(0): Job id 1 sleeping for 1 and produced job with duration = 7
Consumer(1): Job id 0 consumption done..
Consumer(1): Job id 1 grabbed item..about to consume for t = 8..items left in queue = 2
```



```
OpenSSH SSH client
Consumer(0): Job id 0 grabbed item..about to consume for t = 6..items left in queue = 0
Producer(0) woke up..
Producer(0): Job id 0..current number of jobs in buffer = 0
Producer(0): Job id 0 sleeping for 4 and produced job with duration = 7
Producer(0) about to go to sleep for 5 seconds..
Consumer(1): Job id 0 grabbed item..about to consume for t = 7..items left in queue = 0
Producer(1) woke up..
Producer(1): Job id 0..current number of jobs in buffer = 0
Producer(1): Job id 0 sleeping for 4 and produced job with duration = 6
Producer(1) about to go to sleep for 3 seconds..
Consumer(2): Job id 0 grabbed item..about to consume for t = 6..items left in queue = 0
Producer(2) woke up..
Producer(2): Job id 1..current number of jobs in buffer = 0
Producer(2): Job id 1 sleeping for 2 and produced job with duration = 3
Producer(2) about to go to sleep for 1 seconds..
Producer(2) woke up..
Producer(2): Job id 2..current number of jobs in buffer = 1
Producer(2): Job id 2 sleeping for 1 and produced job with duration = 10
Producer(1) woke up..
Producer(1): Job id 1..current number of jobs in buffer = 2
Producer(1): Job id 1 sleeping for 3 and produced job with duration = 8
Producer(1) about to go to sleep for 4 seconds..
Producer(0) woke up..
Consumer(0)Producer(0): Job id ): Job id 0 consumption done..1
Consumer(0): Job id 1 grabbed item..about to consume for t = ..current number of jobs in buffer = 33
..items left in queue = 2
Producer(0): Job id 1 sleeping for 5 and produced job with duration = 2
Producer(0) about to go to sleep for 1 seconds..
Consumer(2): Job id 0 consumption done..
Consumer(2): Job id 2 grabbed item..about to consume for t = 10..items left in queue = 2
Producer(0) woke up..
Producer(0): Job id 2..current number of jobs in buffer = 2
Producer(0): Job id 1 sleeping for 1 and produced job with duration = 7
Consumer(1): Job id 0 consumption done..
Consumer(1): Job id 1 grabbed item..about to consume for t = 8..items left in queue = 2
Producer(1) woke up..
Producer(1): Job id 2..current number of jobs in buffer = 2
Producer(1): Job id 1 sleeping for 4 and produced job with duration = 7
Consumer(0): Job id 1 consumption done..
Consumer(0): Job id 1 grabbed item..about to consume for t = 2..items left in queue = 2
Consumer(0): Job id 1 consumption done..
Consumer(0): Job id 1 grabbed item..about to consume for t = 7..items left in queue = 1
Consumer(1): Job id 1 consumption done..
Consumer(1): Job id 1 grabbed item..about to consume for t = 7..items left in queue = 0
Consumer(2): Job id 2 consumption done..
Consumer(0): Job id 1 consumption done..
Consumer(1): Job id 1 consumption done..
Consumer(2): Job id 2 timed out waiting..exiting thread..
Consumer(0): Job id 1 timed out waiting..exiting thread..
Consumer(1): Job id 1 timed out waiting..exiting thread..

Joined all threads....cleanup starts....exiting..
ya1220@edge39:consumer_producer$
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