



















Common Linux Semaphore Functions

| sem_init() / | / Initialize the semaphore value with a non-negative | e int |
|----------------|--|-------|
| sem_wait() / | / The logic of wait() | |
| sem_post() // | The logic of signal() | |
| sem_getvalue() | // Retrieve the current value of a semaphore | |
| | | |
| | Use Linux man pages to find out the meaning! | |
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Try the Program with Various Settings

- Lock value 1?
- Lock value 5?
- Lock value 0?
- Lock value -1?
- post() without wait()
- wait() without post()?

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Java Synchronized Method
Exampleclass Counter {
 private int count;
 counter(int init) { this.count = init; }
 public synchronized void increment() {
 this.count ++; }See code at http://www.eg.bucknell.edu/-cs315/Fall13/code/synch/CounterDemo.java

Compile and Execute the Program

[xmeng@linuxremote1 sync]\$ javac CounterDemo.java [xmeng@linuxremote1 sync]\$ java CounterDemo value after 500 [xmeng@linuxremote1 sync]\$

// when commenting out the "synchronized" keyword

[xmeng@linuxremote1 sync]\$ javac CounterDemo.java [xmeng@linuxremote1 sync]\$ java CounterDemo value after 479 [xmeng@linuxremote1 sync]\$ java CounterDemo value after 454 [xmeng@linuxremote1 sync]\$

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