

### Activity 9.3 – Process Synchronization and Deadlock

```
root@--:~# ./semaphore.out
Thread 1 trying to decrement the semaphore
Thread 1 can enter its critical section
Thread 1 reads the value of the shared variable as: 1
Local update by Thread 1: 2
Thread 2 trying to decrement the semaphore
Value of the shared variable updated by Thread 1 is: 2
Thread 1 increment the semaphore
Thread 2 can enter its critical section
Thread 2 reads the value of the shared variable as: 2
Local update by Thread 2: 1
Value of the shared variable updated by Thread 2 is: 1
Thread 2 increment the semaphore
Final value of the shared variable is 1
root@--:~# |
```

Compile and run the code list above. Screenshot the result and answer the following questions.

a. What is the final value of the shared variable?

**The final value of the shared variable is 1**

b. From the final value that you obtained, which thread first obtains access to the shared variable?

**Thread 1 can get the access it first and will increment it by 1**