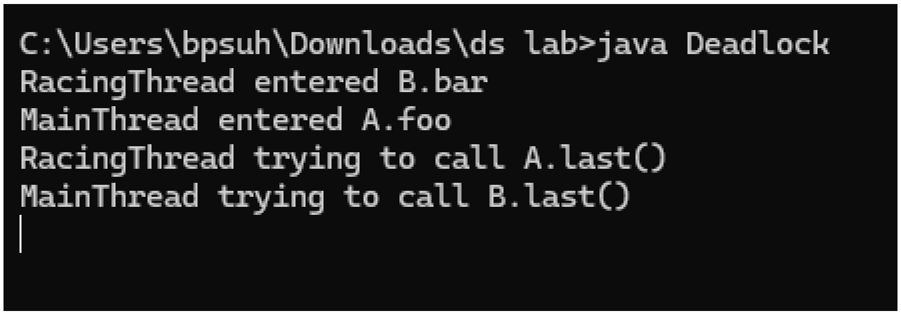
Demonstrate Inter process Communication and deadlock

```
class A {
  synchronized void foo(B b) {
    String name = Thread.currentThread().getName();
    System.out.println(name + " entered A.foo");

    try {
      Thread.sleep(1000);
    } catch (Exception e) {
      System.out.println("A Interrupted");
    }

    System.out.println(name + " trying to call B.last()");
    b.last();
  }

  synchronized void last() {
    System.out.println("Inside A.last");
  }
}

class B {
  synchronized void bar(A a) {
    String name = Thread.currentThread().getName();
    System.out.println(name + " entered B.bar");
```

```
        try {
            Thread.sleep(1000);
        } catch (Exception e) {
            System.out.println("B Interrupted");
        }

        System.out.println(name + " trying to call A.last()");
        a.last();
    }

    synchronized void last() {
        System.out.println("Inside B.last");
    }
}

class Deadlock implements Runnable {
    A a = new A();
    B b = new B();

    Deadlock() {
        Thread.currentThread().setName("MainThread");
        Thread t = new Thread(this, "RacingThread");
        t.start();

        a.foo(b); // Get lock on a in this thread.
        System.out.println("Back in main thread");
    }

    public void run() {
        b.bar(a); // Get lock on b in other thread.
        System.out.println("Back in other thread");
    }

    public static void main(String[] args) {
        new Deadlock();
    }
}
```



```
C:\Users\bpsuh\Downloads\ds lab>java Deadlock
RacingThread entered B.bar
MainThread entered A.foo
RacingThread trying to call A.last()
MainThread trying to call B.last()
```