

13/2/24

Date :  
Page No :LAB -10 (b)

## Demonstrate Deadlock

```
class A
{
    synchronized void fruits (B b)
    {
        String name = Thread.currentThread().
            getName();
        System.out.println(name + "entered A.");
        try {
            Thread.sleep(1000);
        } catch (Exception e) {
            System.out.println(name + "trying to
                call B.last()");
            b.last();
        }
    }
    void last() {
        System.out.println("Inside A.last()");
    }
}

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



```
Thread.sleep(1000);
} catch (Exception e) {
    System.out.println("B Interrupted");
}
System.out.println(name + "trying to
    call A.last()");
a.last();
}
void last() {
    System.out.println("Inside A.last");
}
}
```

```
class Deadlock implements Runnable
{
    A a = new A();
    B b = new B();
    Deadlock() {
        Thread.currentThread().setName("Main
            Thread");
        Thread t = new Thread(this,
            "Running Thread");
        t.start();
        a.fruits(b);
        System.out.println("Back in main
            thread");
    }
    public void run() {
        b.veggies(a);
        System.out.println("Back in other
            thread");
    }
}
```



Date : \_\_\_\_\_

Page No : \_\_\_\_\_

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

### OUTPUT -

MainThread entered A.fruits

RunningThread entered B.veggies

MainThread trying to call B.last()

Inside A.last

Back in main thread

RunningThread trying to call A.last()

Inside A.last

Back in other thread

13/6/20