Name: Sayyed Sohail Rashid	Course Name: DC-LAB
Class: BE-CO	Batch: 01
Roll no: 18CO48	Experiment No: 06

Aim : To Implement the Deadlock Detection Algorithm.

Code:

TestThread.java

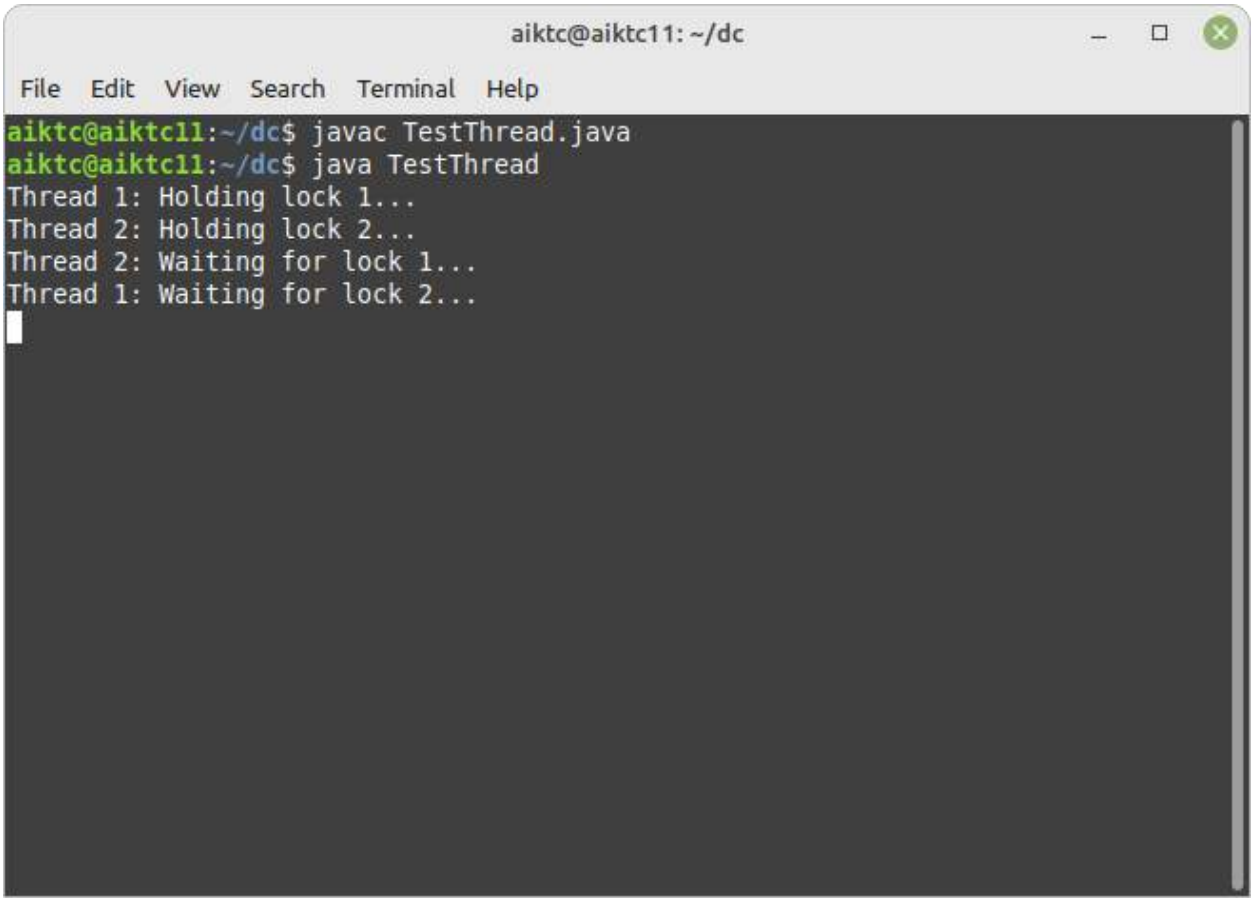
```
import java.io.*;
public class TestThread {
public static Object Lock1 = new Object();
public static Object Lock2 = new Object();

public static void main(String args[]){
ThreadDemo1 T1 = new ThreadDemo1();
ThreadDemo2 T2 = new ThreadDemo2();
T1.start();
T2.start();
}

private static class ThreadDemo1 extends Thread {
public void run() {
   synchronized (Lock1) {
      System.out.println("Thread 1: Holding lock 1...");
      try{ Thread.sleep(10); }
      catch(InterruptedException e){}
      System.out.println("Thread 1: Waiting for lock 2...");
      synchronized(Lock2){
      System.out.println("Thread 1: Holding lock 1 & 2...");
}
}
}
}
private static class ThreadDemo2 extends Thread {
public void run() {
   synchronized (Lock2) {
```

```
        System.out.println("Thread 2: Holding lock 2...");
        try{ Thread.sleep(10); }
        catch(InterruptedException e){}
        System.out.println("Thread 2: Waiting for lock 1...");
        synchronized(Lock1){
        System.out.println("Thread 2: Holding lock 1 & 2...");
}
}
}
}
}
```

Output:



Conclusion:

Deadlock has been successfully detected between the two threads.