Exp 8 Non Tokenztn

import java.util.Scanner;

import java.util.concurrent.locks.Lock;

import java.util.concurrent.locks.ReentrantLock;

class Site {

private int id;

private Lock lock;

public Site(int id) {

this.id = id;

this.lock = new ReentrantLock();

}

public void request(Site other) {

System.out.println("Site " + this.id + " sends REQUEST message to Site " + other.id);

other.receiveRequest(this);

}

public void receiveRequest(Site from) {

System.out.println("Site " + this.id + " receives REQUEST message from Site " + from.id);

System.out.println("Site " + this.id + " sends REPLY message to Site " + from.id);

from.receiveReply(this);

}

public void receiveReply(Site from) {

System.out.println("Site " + this.id + " receives REPLY message from Site " + from.id);

}

public void enterCriticalSection() {

System.out.println("Site " + this.id + " enters critical section");

}

}

public class Main {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the number of sites: ");

int numSites = scanner.nextInt();

scanner.close();

Site[] sites = new Site[numSites];

for (int i = 0; i < numSites; i++) {

sites[i] = new Site(i + 1);

}

sites[0].request(sites[1]);

sites[0].enterCriticalSection();

sites[0].request(sites[2]);

sites[0].enterCriticalSection();

}

}

Op

Enter the number of sites: 3

Site 1 sends REQUEST message to Site 2

Site 2 receives REQUEST message from Site 1

Site 2 sends REPLY message to Site 1

Site 1 receives REPLY message from Site 2

Site 1 enters critical section

Site 1 sends REQUEST message to Site 3

Site 3 receives REQUEST message from Site 1

Site 3 sends REPLY message to Site 1

Site 1 receives REPLY message from Site 3

Site 1 enters critical section

=== Code Execution Successful ===