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## Philosophers.java

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/*****
/
/   filename:  Philosophers.java
/
/   description:  This is the philosophers thread that implements the dining
/                 philosophers monitor.
/
/   author:  Paladino, Zac
/   login id:  cps346-n1.16
/
/   class:  CPS 346
/   instructor:  Perugini
/   assignment:  PJ #3
/
/   assigned:  March 11, 2009
/   due:  April 15, 2009
/
/*****/
class Philosophers implements Runnable{
    int id;
    DiningPhilosophersMonitor Monitor;
    private static final int NAP_TIME = 5;

    Philosophers (int nid, DiningPhilosophersMonitor M){
        this.id = nid;
        this.Monitor = M;
    }

    public void run() {
        System.out.println("Philosopher " + id + " just started.");

        while(true){
            Monitor.pickupForks(id);
            eat();
            Monitor.releaseForks(id);
            nap();
        }
    }

    private void eat(){
        System.out.println("Philosopher " + id + " just ate.");
    }

    static void nap() {
        nap(NAP_TIME);
    }

    static void nap(int duration) {
        int sleeptime = (int) (duration * Math.random() );
        try { Thread.sleep(sleeptime*1000); } catch (InterruptedException ie) {
    }
    }
}

```