

Job.java

```
public class Job
{
    //      p[1]: job number p[2]: job priority
    //      p[3]: job size (in kb) p[4]: maximum CPU time
    //      p[5]: current time
    // This will model after job given by sos in Crint
    int idNum;        // The job's id number
    int size;         // Size of job in Memory-to-Drum
    int maxCPUtime;   // Maximum time to run in CPU- terminate after
    int address;      // The address of the job if in memory
    int currentCPUtime; // Time ran in CPU
    int pendingIO;    // Number of I/O requests pending
    int direction;    // 0 = Drum-to-Memory, 1 = Memory-to-Drum, -1 = No Swap
    boolean inMemory; // True is job is in memory
    boolean terminated; // True if job has terminated
    int priorityTime; // Amount of time job has been in memory
    boolean latched;  // doing IO
    boolean ready;    // Job is in CPU ready queue
    boolean blocked;  // Job is blocked /(waiting for I/O)
    boolean swapped;  // Job has been swapped out of memory at least once
    boolean inSwapQueue; // Job is waiting to be swapped /(in or out)
    boolean inDrum;   // Currently swapping into/out of memory

    /**
     * CONSTRUCTOR
     */
    Job (int[] p)
    {
        // From sos
        idNum = p[1];
        size = p[3];
        maxCPUtime = p[4];
        priorityTime = p[5];
        // Job defaults
        address = -1;
        currentCPUtime = 0;
        inMemory = false;
        pendingIO = 0;
        direction = -1;
        terminated = false;
        latched = false;
        ready = false;
        blocked = false;
        swapped = false;
        inSwapQueue = false;
        inDrum = false;
    }
}
```