MODIFIED SCHEDULER

The scheduler maintains two process queues. The first queue has high priority [all processes in the first queue are run before any process is run from the second queue] but allows only short quanta - 45 ms. The second queue has a 100 ms quantum.

Any process which is in the first (high priority) queue, and which executes for its entire quantum is rescheduled into the second queue.

There are three circumstances in which a process is placed in the first queue:

1. It has just been created.
2. It has just unhung from an event channel (it received an event or interrupt).

3. A process, which is about to be destroyed, and which is not currently scheduled, must be scheduled so that the swapper can destroy it.
Implementation

All calls on `resched` place a process in the first queue. `swapout` calls `resched` every time it swaps a process out. If the process being rescheduled is already in the second queue, `resched` is a no-op. Otherwise, a call is made on `resched` to remove the process from the first queue, then the process is scheduled into the second queue.

Register Changes

I. Calls on `resched` hook like calls on `sched`

II. `resched` uses all registers used by `sched` and `66"