

3.1

The NULL process is initialized in the function `sysinit()` inside the file `initialize.c`. The priority of the NULL process is 0. The process state of the NULL process is 1. Lastly, the PID of the NULL process is 0.

3.5

The priority of the NULL process is initialized in `initialize.c` to be 0. The NULL process is the only process that will have a priority of less than 1 (it will always be 0). If a process' priority is initialized to anything less than 1, a `SYSERR` will be returned in `create.c`.

If a process wants to change priority to something less than one, `chprio()` will change the process' priority to 1 since the NULL process should be the only process with a priority of 0. Also, if the NULL process wants to change its priority to something other than 0, the changes made to `chprio()` will prevent it from changing. Therefore, the only process that will have a priority of 0, and always will, is the NULL process.