

This assignment is extra credit (it isn't hard, there just isn't much time left in the semester).

Purpose: In this assignment we use the `proc` pseudo file system to find out information about the operating system. We will be examining that file system and answering questions

Starter questions: (about `self`)

What is the virtual memory size of (`self`)? (`VmExe`)

To get a better flavor of what `self` is answer the following.

What is the name of the current executable? (Use `ls -l` to find out.)

What is the command line? (Use `cat` to find out.)

What is the command line? (Use `vi` to find out.)

Notice: A program can use `self` to find out about itself.

Hardware questions:

What is the model name of the cpu?

What block devices is the kernel supporting?

What is the physical geometry on the `ide` device called `hda`? (This is the computer's hard drive.) Note the geometry format is cylinders heads sectors.

What RAM addresses are being allocated to the onboard video chip?

How many timer and how many ide interrupts occur in 10 seconds? Hint: batch three commands as
`cat [filename] ; sleep 10 ; cat [filename]`

then do the math. Sometimes the system is pretty idle and you won't get a disk (ide) interrupt.

How many packets does the network device `eth0` received in 10 seconds?

Software questions:

What (real) file systems is the kernel supporting? (If it says `nodev` it is a pseudo filesystem.)

What is the name of the pseudo file system used by pipes? (It's obvious from the name if you look at the list.)

How much memory is allocated to page tables?

What is the maximum number of files that the kernel will allow to be open at one time? (Hint: `file-nr`.)

What is the maximum number of semaphores in a semaphore array?

Submit: A handwritten or printed paper with your answers. No code this time.