

Chapter 5

Examine the `devices` pseudo file in `/proc`

What are the major numbers assigned to the first and second “sd” (scsi/sata disk) controllers?

Examine the `ls -l` entry for `sda2` in the `/dev` directory. What are the major and minor numbers for this device? Hint: look at all the `sda` devices and spot the pattern.

For this next part, you will need your magic numbers (same as in homework 1, use `/net/getmagicnumber`). Your magic numbers determine where you start before doing disk scan algorithms.

You will start at disk position `xx`, where `xx` are the last two digits of your magic number. That is, if your last two magic numbers are 3 and 6 then `xx` is 36.

You are moving toward the higher numbers (this will matter for some of the algorithm answers below but not all).

You have the following disk read requests pending:

99 47 72 19 06 55 20

After you have done the first three reads, the following requests arrive:

78 07 33

What is the order of disk reads for each of the following algorithms:

First Come First Serve

Shortest Seek Time First

Reversing Scan

Circular Scan

Submit: A handwritten or printout with your answers and, if applicable, the commands you used to get the answers. Make sure to include your magic numbers.

Practice: This will most likely be on the exam. I would suggest grabbing random numbers (and a random start position) and working through these a few times.