## 5:W35: Managing Files on Steroids with Shell

## DESCRIPTION

Your supervisor has shared a <u>folder of photos on Sciencedata.dk</u> with you (password is 2020CDS, folder is 500Mb and contains 189 images) and needs your help with a couple diagnostics:

1) Identify the names and format of the 3 biggest files. Can you come up with a command to generate a numerically ordered list of 3 biggest files? (hint: consider using **wc** to gauge image size)

[lists all the files with sizes starting with the largest, and then taking the first three of that list]  $\rightarrow$  |s -S | head -n 3

Lists the files from largest to smallest | gets the top three results which are the biggest files

```
9240_Overview_S.RW2
9247_Overview_SW.RW2
9237 Overview W.RW2
```

```
\rightarrow wc -c * | sort -n | tail -n 4
```

Find the byte size | sorts from smallest to largest | gets the last three 3 which are the biggest files, need 4 because it also gets the total line

- 2) Some of the image files are empty, a sign of corruption. Can you **find** the empty photo files (0 kb size), count them, and generate a list of their filenames to make their later replacement easier?
- → find -empty > empty files.txt
- → wc -l empty files.txt

Tells us there are 74 empty files

3) **Optional/Advanced:** Imagine you have a directory <u>goodphotos/</u> (same password as above) with original non-zero-length files sitting at the same level as the current directory. How would you write a loop to replace the zero length files?