Instructions:

1. Download and install Docker on your computer.
2. Create an empty repository (git init)
3. Write a script (bash, python, PowerShell or perl) that:
   1. Gets the centos7 base image from DockerHub (docker pull)
   2. Run the following commands within the container (docker run, docker exec)
   3. Get (wget, curl) a file from my S3 bucket: <https://rgw-msu.osris.org/OsirisAdmin-keenandr/test-input>
   4. Sort by fourth column, then sorted by third column (delimited by : )  
      A test input like:

sys:x:3:3:sys:/dev:/usr/sbin/nologin

sync:x:110:65534:sync:/bin:/bin/sync

games:x:5:11:games:/usr/games:/usr/sbin/nologin

lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin

mail:x:8:7:mail:/var/mail:/usr/sbin/nologin

becomes:

sys:x:3:3:sys:/dev:/usr/sbin/nologin

lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin

mail:x:8:7:mail:/var/mail:/usr/sbin/nologin

games:x:5:11:games:/usr/games:/usr/sbin/nologin

sync:x:110:65534:sync:/bin:/bin/sync

* 1. Compute sha256 checksum on the sorted file
  2. Count and print number of entries of each type of shell in column 7 (/bin/bash, /usr/sbin/nologin, etc.). For the example above:

4 /usr/sbin/nologin

1 /bin/sync

1. Commit script with readme to a new repository in MSU Gitlab with your MSU account. (<https://gitlab.msu.edu>)
2. Add Andy ([keenandr@msu.edu](mailto:keenandr@msu.edu)) to the repository permissions.