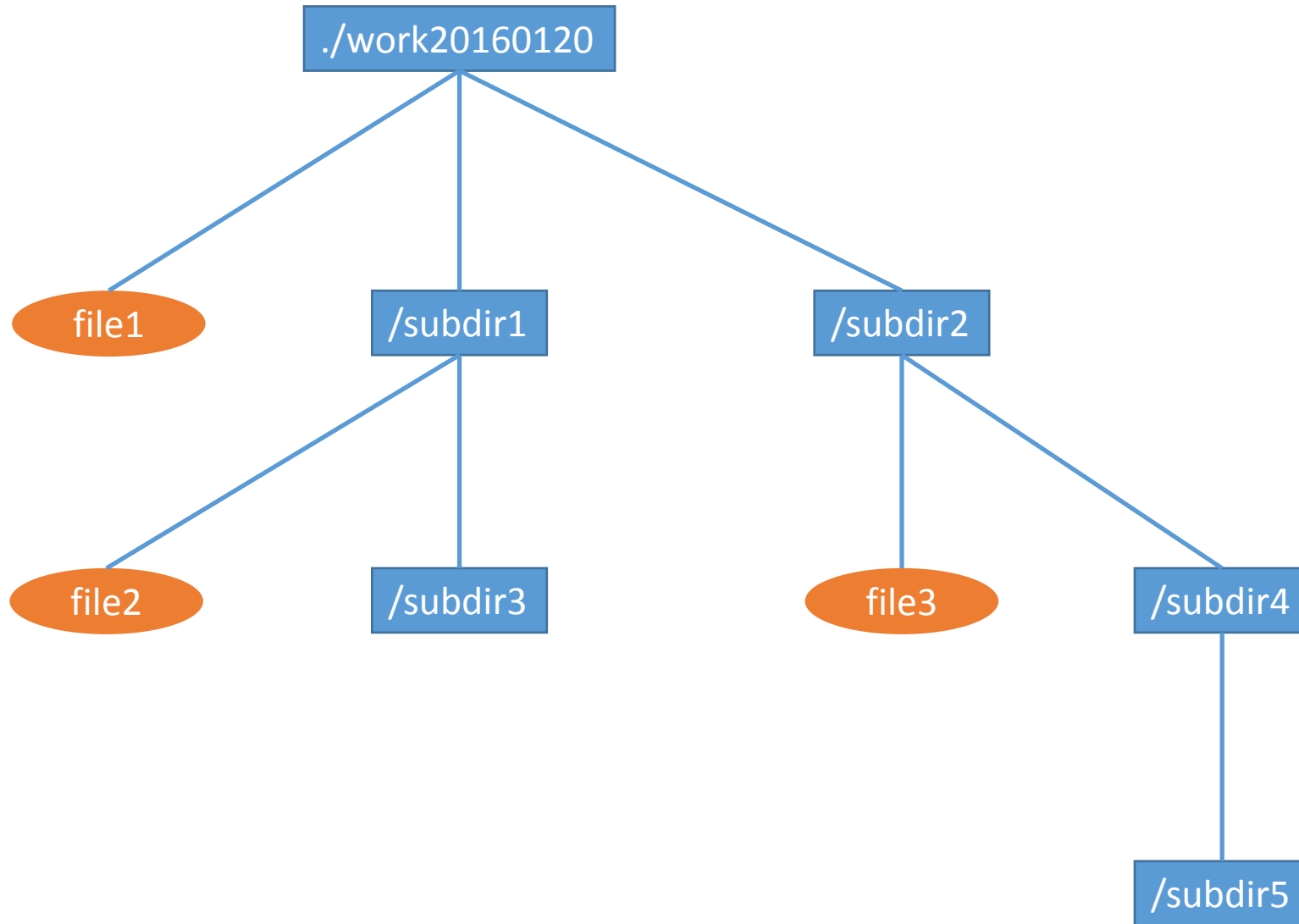


Practice 1: Follow me to build a local file system on your local machine:

Linux Commands:

- ls
- mkdir (-p)
- Cd
- pwd
- touch
- nano
- cat
- less
- wc
- cp
- mv



Practice 2: Follow me to submit jobs to zcluster and then use grep, awk, and sort on your jobs:

Job submission steps:

1. `ssh s_200@zcluster.rcc.uga.edu`
2. `make_eshatch`
3. `cd /eshatch4/s_200/s_200_Jan_20`
4. `cp -r /tmp/gacrc_Linux/serials/ ./`
5. `cd serials/`
6. `qsub -q rcc-30d sub.sh`
7. `qstat`

Usage of grep, awk, and sort utilities:

```
ls -l | more
ls -l | grep ".sh"
ps aux | awk '{if($1=="s_200") print $0}' | more
qstat -u "*" | awk '{print $4}' | sort | less
qstat -u "*" | grep `s_200` | grep `r` | awk 'BEGIN{n=0} {n++} END{printf "%d jobs
running on queue\n", n}'
```