

CS 45: Operating Systems

CLab 11: Yes!

DUE by next class

Write your answers in `README.md`. Create a `COLLAB.md` file to keep track of any outside resources you might use. Be sure to push to the repo after class (even if you are not done).

1 yes

0. Just to be safe, let's set the file size limit of your bash shell; so no huge files get created accidentally in this clab.

```
$ ulimit -f 20480
```

1. Familiarize yourself with the `yes` program.

```
$ yes
y
y
y
...
$ yes no
no
no
no
...
```

2. Run `yes` through `pv` to note its throughput (KiB/s or MiB/s or GiB/s):

```
$ yes | pv > /dev/null
```

3. Explain what `|` and `>` are doing in that last part (`man pv`)?
4. Write a C program that acts like `yes` called `syes`.

```
$ gcc -o syes syes.c
$ syes
y
y
y
...
```

5. Run `syes` through `pv` and note its throughput (KiB/s or MiB/s or GiB/s), how does it compare?

```
$ yes | pv > /dev/null
```

6. Can you speed it up any (maybe calling `write` directly, did that work?)?
7. Can `strace` help at all?