OS PS1

1)

1.

```
$ chmod 777 test.c
```

2.

```
$ wc -l test.c
```

3.

```
$ tail -n 3 test.c
```

2a)

1. 300 processes
2. 9 processes
3. User hovers around 3% and system hovers around
4. Google Chrome Helper: 8.8%, sysmond: 5.8%, Activity monitor: 2.0%
5. They are constantly changing. Each program is constantly changing states. For example maybe the email client recieved an email, as a result it has to use more of the CPU.
6. After poking around the internet I found that Google Chrome

Helper is the interface between the embed code in the browser and a remote server. It is a feature of the chromium project.

2b)

1. Kernal task: 875.0, Google Chrome: 701.8, Acrobat Reader: 488.8
2. Not as much. We have to be actively storing things for the applications to have significant changes in the amount of memory being used.
3. Memory could be the theorectical amount while actual is the amount used in practice.
4. 8.00GB
5. 6.70GB

2c)

1. 99.7
2. 99.8 and 99.7. My machine has multiple cores
3. Each ran at about 99.5%. The spinning wheel turned on when I opened Microsoft word. Also the fan turned on.

2d)

1. The amount of memory keeps growing.
2. All of the python loops are running and taking a lot of memory but they grow slower. The loops happen more slowly.
3. I tried to open Microsoft word and it would not open. The

spinning wheel of death began to come up very frequently. Responsiveness declined significantly.