

Winter 2020
CS3413
Lab 4

Linux Memory Investigation

Explore the linux OS to observe paging in action.

vmstat is a command that displays information about the amount of physical and virtual memory you have available in the system. Read the man page of the ***vmstat*** command.

ps is a command that displays information about processes in the system. Read the man page of the ***ps*** command.

For this lab submit a text file that contains your answers to the questions below.

Questions

- 1) Run the command **vmstat 5**. Next, start as many programs on your linux machine as you can think of. What programs did you start? What do you observe from the output of **vmstat**?
- 2) Run the command **ps -eo minflt,majflt,cmd,uid |less**. What process has the greatest number of page faults? What is the difference between a major page fault and a minor page fault?
- 3) Can you cause the system to NOT run out of memory, but to perform a heavy amount of paging? How did you achieve this?