CSE 3320 Notes 10/16/2019

Process an execution or by part (Last Lecture):

* Fork
* Exec
  + Fork and Exec may fail (fork less common to fail: due to memory- ran out of memory, permission)
    - Fork:
      * Out of memory (no unlimited memory)
      * Permissions
    - Exec:
      * Return a code
      * Return a local variable
  + From external view:
    - Ps-ax
    - Top
    - Htop

Threads (Light Weight Processes)

* User Level
  + Clib

Thread Management:

* + - Open
    - Read
    - Write
* Kernel Level (Lower)
  + Parameter Sweep
  + Pipeline
    - Coordinate between processes by waiting
      * Busy Wait
      * Non-busy wait- informed when change happens
    - Pipes
    - Locks (len/string)
    - Swap
    - SOM-phere
      * Prints
      * Disk
      * Request🡪Queue(wait)🡪Signal for proceeding
    - Locks/S-phone
      * Extremely rare condition

Scheduling Proceses

Thread

Manage Processes

RAM

* 8its to 12/64bits
* 8-64 bit for pointer address

Compile:

* Source🡪Obj(instructions + Constants[num/string] + Information about reserve size/space)
* Exe: lib obj… combined by linker

Dynamic link🡪 clib

* Share between multiple exe