CSI 3336 Systems Programming
Homework 10

Program 1 should ensure that execution happens in parallel. For example any child process should not have any expectation of finishing execution before any other child process.

1. Write a program that forks child processes. The number of processes will be supplied as the only command-line parameter. Each process will then display their process ID and return a number that reflects the order in which it was created. (i.e. the first process returns 1 the second process returns 2). The parent process will collect each child and display: "Child: x is done" (where x is the number returned by the child - the child's order number) until all children are collected.

2. Write a program that provides a simple command interface. Your program should allow for the commands: uinfo <username>, $var (where var is an environment variable), sysinfo, and quit. After a command is entered the program should spawn a child process to display the requested information to the screen.
    - uinfo displays:

        uinfo fry

username	fry
real name: realname	real name: Cindy Fry
user id: uid	user id: 1477
group id: gid	group id: 101

    - $var displays:

        $HOME
        /home/csi/f/fry

    - sysinfo displays:

        sysinfo

nodename	earth
sysname	OS: Linux
release	Release: 3.10.0-514.2.2.el7.x86_64

    - quit stops your program