

CS 377 Discussion 2

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For Today...

- Lab 0
- Worksheet
- Fork()
- Exec()
- Lab 1

Lab 0

- Due today at 5pm
- Submitted through Moodle

Fork()

- Duplicates current process, new process is the 'child' process
- Returns process ID of child process to parent
- Returns 0 to child process
- Examples (fork1.c, fork2.c)

Exec()

- Family of functions that do the same thing in different flavors
- Replace the current process image with a new process image
- Executes given file with given parameters
- Does not return unless there is an error

Lab 1

- Create clone shell in C
- Takes name of program to run + 3 parameters:
 - ≡ Number of copies (processes) to run, from 1 to 9
 - ≡ Whether they should run concurrently or sequentially
 - ≡ Timeout specifying max duration for each process in seconds, from 1 to 9
 - 0 specifies no timeout
 - If sequential, should not wait entire duration if executed successfully
- Program skeleton that implements parsing logic will be provided
- More specifics will be available on website