

# Operating System I – Fall 2017

## Examples of code using fork

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### General Presentation

This code was presented during the lecture, and is poorly commented on purpose. To compile any of those files, use

```
gcc fork_x.c
```

where `x` is the number of the program you want to compile. This will create a file named `a.out`. To execute it, use

```
./a.out
```

If you have questions, feel free to reach me at [caubert@augusta.edu](mailto:caubert@augusta.edu).

### Presentation of the programs

- `fork_1.c` is a simple `fork` program, with some useful references.
- `fork_2.c` introduces the possibility of branching in your program, to make the child and the parent execute different instructions.
- `fork_3.c` shows an example of a child process becoming an orphan.
- `fork_4.c` introduces the `wait` function. Two questions are asked in that program.
- `fork_5.c` illustrates how to read the exit code of the child process in the parent process.
- `fork_6.c` illustrates how to execute a different program inside a process.
- `fork_7.c` illustrates the same idea, but using `execl`.
- `fork_8.c` is a dangerous program that should freeze ... but that won't. Why? Tip: the answer is indicated by `ulimit -a`.