

# COP 4600 - Operating Systems Design

## Spring 2015

### Lab 3: UNIX System Calls

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#### *Objectives:*

- Get familiar with UNIX system call usage
- Use multi processing programming in UNIX using processes

#### *Pipelining Processes:*

In this assignment, you are required to write a C program called ring that connects three processes via pipelining in the following way.

- The first process asks the user an input string from standard input and passes it to a second process.
- The second process should invert the string and pass it to a third process.  
E.g. **Input:** Hello World **Output:** dlroW olleH
- The third process should transform the string into an uppercase string and pass it back to the first process.
- When the first process obtains the string back after being processed, it should print it to standard output.
- At the end the three processes should finish.

The following image represents the schema of the processes.

