CS 162 HW 2

Signal handling / Overview of signals

Overview of signals

Signals are asynchronous messages that are delivered to processes. They are identified by their signal number, but they also have somewhat human-friendly names that all start with signal common ones include:

SIGINT

Delivered when you type CTRL-c. By default, this stops the program.

SIGQUIT

Delivered when you type CTRL-. By default, this also stops the program, but programs treat this signal more seriously than SIGINT. This signal also attempts to produce a core dump of the program before exiting.

SIGKILL

There is no keyboard shortcut for this. This signal stops the program forcibly and cannot be overridden by the program.

SIGTERM

There is no keyboard shortcut for this either. It behaves the same way as SIGQUIT.

SIGTSTP

Delivered when you type CTRL-Z. By default, this pauses the program. In bash, if you type CTRL-Z, the current program will be paused, and bash (which can detect that you paused the current program) will start accepting more commands.

SIGCONT

Delivered when you run fg or fg %NUMBER in bash. This signal resumes a paused program.

SIGTTIN

Delivered to a background process that is trying to read input from the keyboard. By default, this pauses the program, since background processes cannot read input from the keyboard. When

you resume the background process with SIGCONT and put it in the foreground, it can try to read input from the keyboard again.

SIGTTOU

Delivered to a background process that is trying to write output to the terminal console, but there is another foreground process that is using the terminal. Behaves the same as SIGTTIN by default.

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