

COMP 2401 -- Tutorial #9

Signals

Learning Objectives

After this tutorial, you will be able to:

- use signals to communicate between processes, specifically:
 - o send a signal to a process
 - o install signal handlers in a process to catch incoming signals

Tutorial

1. Download the file `T09.zip` from the tutorial page in *cuLearn*. Extract and read through the tutorial files.

There is also a `zip` (`unzip`) tool in Linux. Read the `man` page for the `zip` tool to see how to unzip the tutorial files.

2. Create a Makefile to compile `send.c` and `handle.c` with targets `send` and `handle`. Make `send` and `handle`.
3. Run `handle` in the background, you should see something like:

```
$ ./handle &  
[1] 2329
```

where `2329` is an example of a process ID. In this case, the ID of the running `handle` process is `2329`, but it will be different for your process.

4. Run `send`, enter the PID of `handle` and enter 1, 2, then 0.
5. Run `ps` to list the current running processes. Why is `handle` still running? Kill it.

```
$ kill 2329
```

Use `ps` to check that the process has terminated.

6. Modify `send.c` so that when the user chooses 0, a signal (`SIGINT`) is sent to the process `pid`.

Make `send` and re-run `handle` (again in the background), Run `send`, and enter 0. Run `ps` to verify that `handle` is not still running.