

C Review Recitation Handout

Monday, Oct 4

Activity 0: Reading man pages

- Either type `man getopt` on your Terminal or Google “man getopt”.
- `int getopt(int argc, char * const argv[], const char *optstring);`

What does `getopt` do?

The C library function `getopt` is used to break up options in command lines for easy parsing and to check for valid options.

Describe the parameters that `getopt` takes:

- `int argc`: Number of command line arguments
- `char * const argv[]`: Command line arguments parsed as an array of string
- `const char *optstring`: Options

What does `getopt` return? The argument or error status code.

Other specifications about `getopt`:

Note: use this template to understand other C functions/man pages as well!

Activity 1: `getopt_example.c`

In this first activity, we have given you a file called `getopt_example.c`. Your task is to figure out what this program does!

What does `getopt_example.c` do?

Count the number parsed from the command line

How do you get the program to process arguments (i.e. formatting specifics?)

`./get_example -n arg`

What does the `-v` argument do? The `-n` argument?

`-v` means verbose. It prints the number from 0 to n.
`-n` is the main user input from the command line

Commands

To compile all files, type:

```
$ make clean
```

```
$ make
```

To compile just the example, type:

```
$ make getopt_example
```