

## Overview

help50 is a command line program that makes an effort to translate some of the more arcane error messages that other tools, such as clang or valgrind, sometimes spit out. In this way, it serves as a “virtual TF” of sorts, hopefully helping nudge students in the right direction, so that they needn’t wait for a staff member at office hours when a little bit of translation of the error message is really all that’s needed to move on.

### Key Terms

- help50
- command line

## Usage

To run help50, open a terminal in the CS50 IDE and type `help50 <commands_giving_you_errors>`.

## Output

Say you made changes to `hello.c`, but for some reason when you run `make hello`, you get `make: `hello' is up to date`. If you run `help50` on `make hello` to help figure out why this is happening you’ll likely get what’s on the right.

```
~/workspace/ $ help50 make hello
make: `hello' is up to date.
```

Helping with...

make: `hello' is up to date.

Looks like you already compiled hello and haven’t made any changes to `hello.c` since. Or did you forget to save `hello.c` before running `make`?

Suppose you try to compile `hello.c` and run into an error. Running `help50` `make hello` will help shed some light on the error.

```
~/workspace/ $ help50 make hello
clang -fsanitize=integer -fsanitize=undefined -ggdb3 -O0 -std=c11
-Wall -Werror -Wextra -Wno-sign-compare -Wshadow hello.c
-lcrypt -lcs50 -lm -o hello
hello.c:6:29: error: expected ';' after expression
    printf("hello, world\n")
                           ^
                           ;
```

```
1 error generated.
make: *** [hello] Error 1
```

Helping with...

hello.c:6:29: error: expected ';' after expression

Try including a semicolon at the end of line 6 of `hello.c`.