

Advanced UNIX and Program Completion

C Program Editing

- Create a directory called CS300 in your Documents folder
- Change into the CS300 directory
- Open up a simple text editor called Geany in the Integrated Environment

Create the C Program

- Create the following C program.

```
#include <stdio.h>
int main ()
{
    printf ("hello world\n");
    return 0;
}
```

Save, Build, Execute

- Save your program in Documents/CS300 with the name helloworld.c
- Change into the CS300 directory to see that the file helloworld.c program exists
- Hit the Build button
- Hit the Execute button
- List the contents of CS300 now

Back to command line

- Change **hello world** to **hello yourname** and click the Save button (don't Build or Execute)
- Go into your shell and type **less helloworld.c**
- gcc is a c compiler so from the command line type **gcc helloworld.c**
- What is the name of the executable created by gcc in the CS300 directory?
- Type **./a.out** and what do you see?

More UNIX Commands

Command / Symbol	Meaning
gzip file	use the gzip utility to compress a file
gunzip file	use the gunzip utility to decompress a file
./a.out > outputfile	save the executable results in outputfile
./a.out >> outputfile	append the execution results to the end of outputfile
./a.out less	pipe the output of a.out to the input of less (useful if the output results are more than a screen in length)

Problems

- Zip up the file `helloworld.c`
- Copy (not move) the zipped file to the parent directory
- Change to the parent directory and unzip the file
- Compile the unzipped file
- Run the executable
- Capture the execution results in a file called **`rslts`**
- Type the command `less rslts`