

Lab 1: C Revision

For this lab you can use C if you prefer, however all future labs should use C++

Make sure you know where all the course material is, and review the assignment 1 specs.

Write a makefile to compile the following code:

```
#include <stdlib.h>
#include <stdio.h>

int main(int argc, char **argv)
{
    while (true)
    {
        fprintf(stdout, "I am in an infinite loop ");
        sleep(10);
    }
    fprintf(stdout, "\n");
    return EXIT_SUCCESS;
}
```

Compile the program and fix any syntax errors.

Compile using:

```
g++ -Wall -pedantic -std=c++14 <files> -o exename
```

Change the code to print to stderr instead of stdout, why is the output different?

1. Write a program to reverse a string, given as input from the command line. Print both strings to the terminal.
2. Write a program that converts a string of 1s and 0s (as a command line arg) in binary to an int. Print the int to the terminal.
3. Now write a program that takes an int as a command line arg, and converts it to a binary string of 1s and 0s. Print the string to the terminal.