

Lab 1 – (10 points)

NOTE: The Introduction Post is part of the lab and worth 5 points. See start page for details.

For information on how to do this lab, see the page on "Differences between C and C++" in the Week 1 module.

Below is a description of two C programs you will write. Please submit the two C source code files asked for to the assignment folder for lab 1 by the due date.

Part A: Convert C++ to C (5 points)

In the Lab 1 assignment folder, there is a lab1a.cpp file. This is written in C++ so it will **not** compile with a C compiler. What you will do is create a new file called lab1a.c and convert the code in lab1a.cpp to compile in **gcc**. Please make sure the output is exactly the same as the output in lab1a.cpp.

NOTE: You won't need to change much to get it to compile and run so don't do massive changes to it.

NOTE: To compile your C code, use **gcc** NOT **g++**. Note that most of the options for **g++** are basically the same in **gcc**. So to compile and run, use:

```
gcc lab1a.c -o prog
```

```
./prog
```

Part B: Working with Command Line Arguments (5 points)

Write a C program called lab1b.c that prints out the given command line arguments.

NOTE: Please remember to use **gcc** to compile your code.

```
-----  
EXAMPLE RUN #1:  
-----
```

```
./lab1b 83 How are you?  
arg 0: ./lab1b  
arg 1: 83  
arg 2: How  
arg 3: are  
arg 4: you?  
-----
```

```
EXAMPLE RUN #2:  
-----
```

```
./lab1b 83 "How are you?"  
arg 0: ./lab1b  
arg 1: 83  
arg 2: How are you?
```