Laboratory Session 0

No submission

This session aims at revising Linux commands and C/C++ programming. The focus is on using commands to learn about the Ubuntu operating system and writing C/C++ programs to do some particular tasks.

Problem 1.1: *Compile And Run C Code in Linux* (0 points)

- Open the text editor (command: gedit) for writing code and terminal (Ctrl + Alt + T) for executing the code through the terminal.
- In the text editor, need to write any code using a C programming language

```
// An example
#include <stdio.h>

int main() {
    printf("welcome to geeks for geeks");
    return 0;
}
```

- Now, save the file with the .c extension. So in this example, the file is saved as welcome.c.
- Compile and run the C code in the terminal using the commands below

```
$ gcc welcome.c
$ ./a.out
```

Problem 1.2: *Compile And Run C++ Code in Linux* (0 points)

- Write the C++ program code in a text file using a text editor and save the file with the .cpp extension.

```
// Another example
#include <iostream>
using namespace std;

int main() {
    cout << "Welcome To Geeks For Geeks For Geeks";
    return 0;
}
```

- Navigate to the directory where the file is saved.
- Execute the command below for compilation and execution.

```
$ g++ cplus.cpp
$ ./a.out
```

Problem 1.3: *Recall C/C++ Programming Language* (0 points)

Read C programming language and The Linux command line for beginners and work with examples for the remaining time.

The programs must handle error situations (including wrong input) in a meaningful way. Make sure the program compiles cleanly with gcc -O2 -Wall -lm.