

SUBJECT: OPERATING SYSTEM.

Aim: To Study about GCC & g++.

THEORY:

1). What is GCC?

- GCC is a key component of "GNU Toolchain" for developing applications and writing operating systems.
- It is a compiler suite that supports many languages such as C/C++.
- It is portable and runs on many operating platforms.
- It is currently available on all Unixes.
- They are also ported to Windows (by Cygwin).
- GCC is also a cross-compiler, for producing executables on different platforms.
- Note: In Bash Shell, the default PATH does not include the current working directory. Hence, you need to include the current path (./) in the command.

2). What is g++?

- GCC (GNU Compiler Collection) provides many compilers, two are: gcc & g++.
- gcc is used to compile C program while g++ is used to compile C++ program.

- Compiling and running a c++ file from unix prompt.

```
g++ hello.cpp
```

- This creates an executable called "a.out". You can run it as follows:

```
./a.out
```

- Since no executable name was specified to g++, a.out is chosen by default.
- Use the "-o" option to change the name:

```
g++ hello.cpp -o hello
```


This will create an executable called "hello".

CONCLUSION: In this practical, we learnt how to use gcc and g++ for C and C++ programs.