

Analysis of the output generated by files using gcc and g++ compilers in Ubuntu

gcc and g++ compilers are used to compile the program of c and c++ languages respectively. These compilers provide sufficient libraries to write, debug and execute the programs of c and c++ languages. Following is the step by step guide to create and write programs in gcc and g++ in Ubuntu:

1. Checking whether gcc and g++ installed or not:

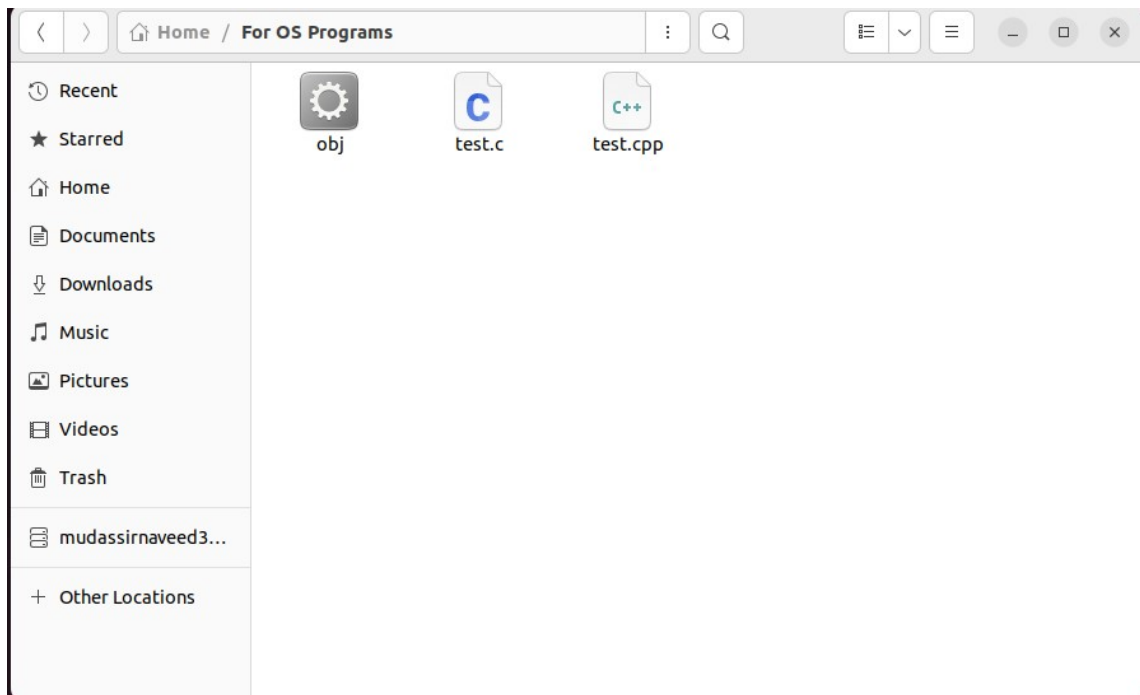
```
mudassirmalik@ubuntu:~$ gcc --version
gcc (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0
Copyright (C) 2021 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

mudassirmalik@ubuntu:~$ g++ --version
g++ (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0
Copyright (C) 2021 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

2. On terminal of Ubuntu write this command to create files:

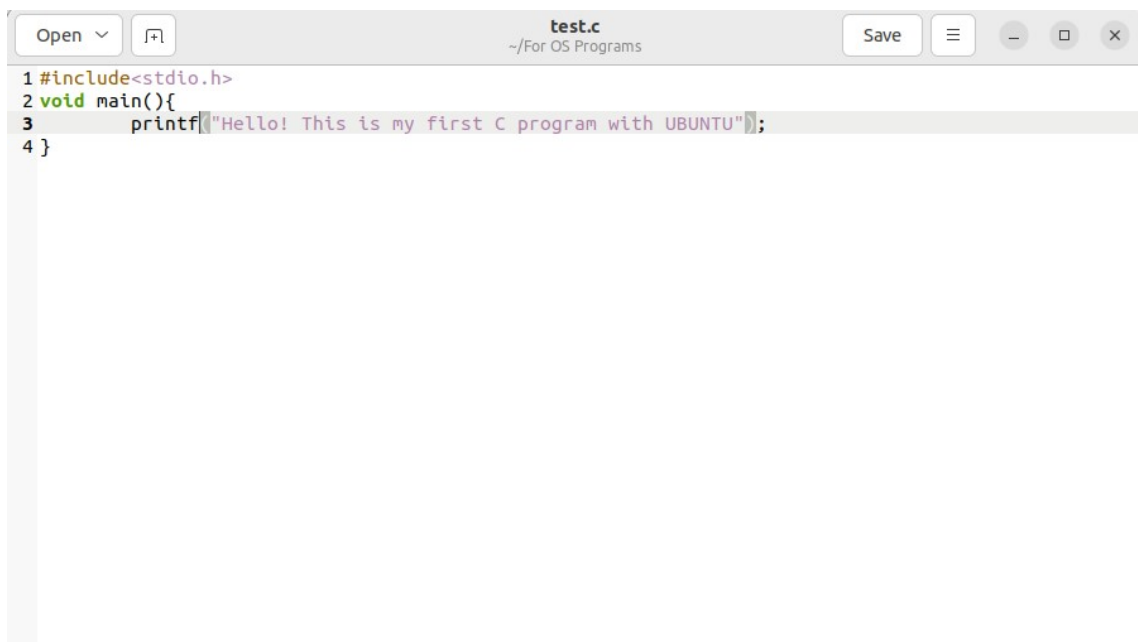
```
touch test.c
touch test.cpp
```

3. In the selected folder double click on the file created:



4. Write the code inside the files with their respective syntax:

For C language:



```
1 #include<stdio.h>
2 void main(){
3     printf("Hello! This is my first C program with UBUNTU");
4 }
```

For C++ language:



```
1 #include<iostream>
2 using namespace std;
3 int main(){
4     cout << "G++ Compiler Testing" << endl;
5     cout << "Compiler working fine" << endl;
6     return 0;
7 }
```

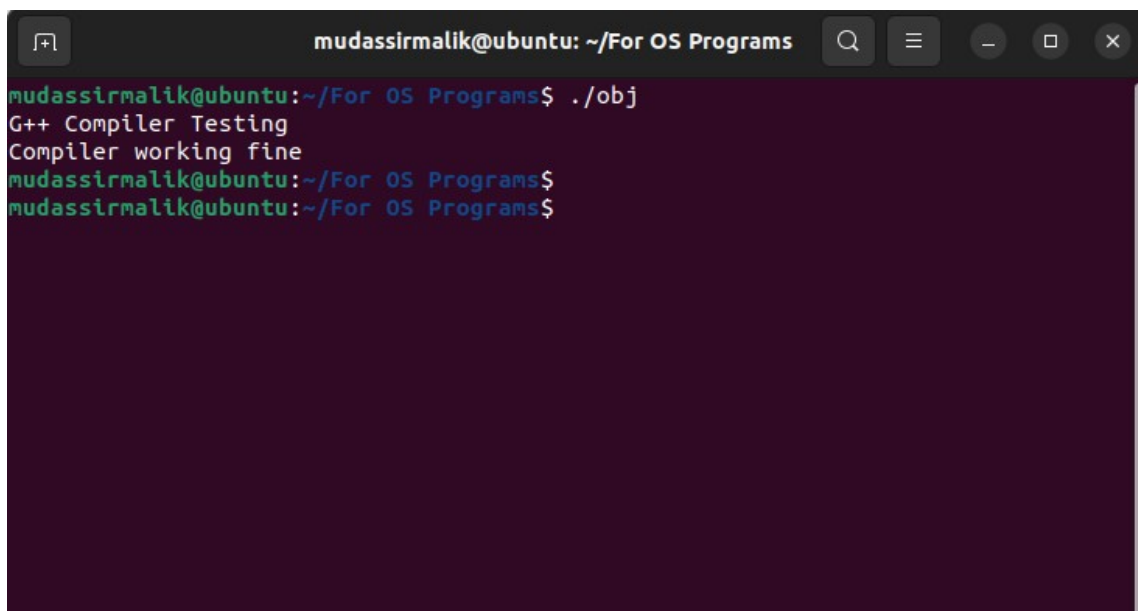
5. Run the commands to create the object files of source files:

```
gcc -o obj test.c
g++ -o obj test.cpp
```

6. Run the Following commands to run the object file:

```
./obj
```

7. The desired Output is as Follows:

A terminal window with a dark background and light-colored text. The window title is "mudassirmalik@ubuntu: ~/For OS Programs". The terminal shows the command `./obj` being executed, which results in the output "G++ Compiler Testing" and "Compiler working fine". The prompt `mudassirmalik@ubuntu:~/For OS Programs$` is shown twice.

```
mudassirmalik@ubuntu: ~/For OS Programs
mudassirmalik@ubuntu:~/For OS Programs$ ./obj
G++ Compiler Testing
Compiler working fine
mudassirmalik@ubuntu:~/For OS Programs$
mudassirmalik@ubuntu:~/For OS Programs$
```

Task 3:

Link of Github Repository:

This is the link of [Github Repository](#) that contains the tasks of lab.
