1 The procedure to install C and C++ in Linux OS

1. To follow the installation procedure, you need to be connected to the `internet`.
2. You must have `Synaptic Package Manager` installed on your machine.

2 The procedure to install `gcc` and `g++` compiler

1. On Ubuntu 10.04 - Click on `System >> Administration >> Synaptic Package Manager`.
2. On Ubuntu 11.04 and higher,

   (a) Press the `Window` key on your keyboard to open `DashHome`.
   (b) Type `Synaptic Package Manager`.
   (c) Click on the `Synaptic Package Manager` option.

3. Enter your `Admin Password`.
4. Click on `OK`.
5. In the search box, type `gcc`.
6. Click on the `gcc` check box >> click on `Mark for Installation`.
7. Click on `Apply`.
8. Now in the search box replace `gcc` with `g++`.
9. Click on the `g++` check box >> click on `Mark for Installation`.
10. Now click on `Apply`.
11. The installation will take a few minutes depending on your internet speed.
12. After the installation completes, open the `terminal` and type `gcc -v`
13. This will display `gcc version version-number <gcc>`
14. However, the version of `gcc / g++` may possibly vary.
15. This message shows that the installation is successfully done.

3 The procedure to install `gcc` and `g++` compiler from Terminal

1. `gcc` compiler is installed by default in `Linux OS`.
2. To install `g++` compiler, open the `terminal`.
3. To do so, press `Alt + CTRL + T` keys together.
4. Type `sudo apt-get install g++`
5. It will prompt for a password.
6. Type your password.
7. The installation will take a few minutes.
8. `g++` will get installed.
9. To check type: `g++ -v`
10. However, the version of `gcc / g++` may possibly vary.
11. This shows that the installation is successfully done.

4 The procedure to install C and C++ in Windows OS

1. To follow the installation procedure, you need to be connected to the `internet`.

2. For `Windows OS`, we will install `MinGW` compiler.

3. Go to `http://sourceforge.net/projects/mingw/files/Installer/`

4. Please locate the executable file `mingw-get-setup.exe`

5. Click on this `.exe` file.

6. A dialog box appears prompting you to `Run` the file.

7. Click on `Run`.

8. This opens the `Installation Wizard`.

9. Click on `Install`.

10. Then click on `Continue`.

11. Again click on `Continue`.

12. Click on the `mingw32-gcc-g++ GNU C++ Compiler` check box and click on `Mark for Installation`.

13. Now check the option for `mingw32-gcc-objc The GNU Objective-C Compiler` also and click on `Mark for Installation`.

14. Click on `Installation` option on the top left hand side corner.

15. Then click on `Apply changes`.

16. Finally, click on `Close`. This will install `gcc and g++ compiler` on your system.

17. Close the window.

18. Next, we need to set the path for the `System Variables`.

19. Right-click on `My Computer`.

20. Click on `Properties`.

21. Then click on the `Advanced tab` or `Advanced System Settings` link.

22. Click on `Environment Variables`.

23. Then under `System Variables` select the `Path`.

24. Double-click on the `Path`.

25. This will open a dialog box to edit the `System Variable`.

26. In `Variable value`, type the location where the `bin` file is present.

27. Add a `semicolon (;)` before adding the path.
    For example: `;C:/MinGW/bin`

28. This will avoid overwriting the paths you have set previously.

29. Now, open the command prompt and type `gcc -v`

30. This will display the version no. of the `gcc` installed.

31. In this case, it will display `gcc version 4.6.2 <gcc>`

32. However, the version of `gcc / g++` may possibly vary.

33. This shows that the installation is successfully done.