

## Practical 3

Basic understanding on free and open source software :

A ) describe open source software with example :

**Open-source software (OSS)** is [computer software](#) that is released under a [license](#) in which the [copyright](#) holder grants users the rights to use, study, change, and [distribute the software](#) and its [source code](#) to anyone and for any purpose.<sup>[1][2]</sup> Open-source [software](#) may be developed in a [collaborative public manner](#). Open-source software is a prominent example of [open collaboration](#), meaning any capable user is able to [participate online](#) in development, making the number of possible contributors indefinite. The ability to examine the code facilitates public trust in the software.<sup>[3]</sup>

<sup>B</sup>) describe free source software with example :

The free software definition presents the criteria for whether a particular software program qualifies as free software. From time to time we revise this definition, to clarify it or to resolve questions about subtle issues. See the [History section](#) below for a list of changes that affect the definition of free software.

### The four essential freedoms

A program is free software if the program's users have the four essential freedoms: [\[1\]](#)

- The freedom to run the program as you wish, for any purpose (freedom 0).
- The freedom to study how the program works, and change it so it does your computing as you wish (freedom 1). Access to the source code is a precondition for this.
- The freedom to redistribute copies so you can help others (freedom 2).

C ) difference between free and open source software :

Free software : 1 Software is an important part of people's lives.

2 Software freedom translates to social freedom.

3 Freedom is a value that is more important than any economical advantage.

4 Examples: The Free Software Directory maintains a large database of free-software packages. Some of the best-known examples include the Linux kernel, the BSD and Linux operating systems, the GNU Compiler Collection and C library; the MySQL relational database; the Apache web server; and the Sendmail mail transport agent.

Open source software : 1 Software is just software. There are no ethics associated directly to it.

2 Ethics are to be associated to the people not to the software.

3 Freedom is not an absolute concept. Freedom should be allowed, not imposed.

4 Examples: Prime examples of open-source products are the Apache HTTP Server, the e-commerce platform osCommerce, internet browsers Mozilla Firefox and Chromium (the project where the vast majority of development of the freeware Google Chrome is done) and the full office suite LibreOffice.