

Practical 3. Basic Understanding on Free and Open-Source Software

- **Open-Source Software**

Open source is a term that originally referred to open source software (OSS). Open source software is code that is designed to be publicly accessible—anyone can see, modify, and distribute the code as they see fit. Open source software is developed in a decentralized and collaborative way, relying on peer review and community production. Open source software is often cheaper, more flexible, and has more longevity than its proprietary peers because it is developed by communities rather than a single author or company.

- Coined by the development environments around software produced by open collaboration of software developers on the internet.
- Later specified by the Open Source Initiative (OSI).
- It does not explicitly state ethical values, besides those directly associated to software development.

Examples:

1. Linux Operating System
2. Open office
3. Firefox browser
4. Android by Google

- **Free Software**

Free software (or libre software) is computer software distributed under terms that allow users to run the software for any purpose as well as to study, change, and distribute it and any adapted versions. Free software is a matter of liberty, not price; all users are legally free to do what they want with their copies of a free software (including profiting from them) regardless of how much is paid to obtain the program. Computer programs are deemed "free" if they give end-users (not just the developer) ultimate control over the software and, subsequently, over their devices.

The term “free software” is sometimes misunderstood—it has nothing to do with price. It is about freedom.

Examples:

1. Linux
2. Blender
3. Word Press
4. MySQL

- **Difference between Free and Open-Source Software**

S.no.	Free Software	Open-Source Software
1.	Software is an important part of people's lives.	Software is just software. There are no ethics associated directly to it.
2.	Software freedom translates to social freedom.	Ethics are to be associated to the people not to the software.
3.	Freedom is a value that is more important than any economical advantage.	Freedom is not an absolute concept. Freedom should be allowed, not imposed.
4.	The freedom to study how the software works and modify it according to your needs and preferences.	The software can be modified and distributed in a different format from the original software
5.	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.	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.