

Practical 3- Basic Understanding on Free & Open-Source Software

a. Open Source Software

Open source software (OSS) is software that is distributed with its source code, making it available for use, modification, and distribution with its original rights. Source code is the part of software that most computer users don't ever see; it's the code computer programmers manipulate to control how a program or application behaves. Programmers who have access to source code can change a program by adding to it, changing it, or fixing parts of it that aren't working properly. OSS typically includes a license that allows programmers to modify the software to best fit their needs and control how the software can be distributed.

Eg.: GNU/Linux, Mozilla Firefox, VLC media player, SugarCRM, GIMP, VNC, Apache web server, LibreOffice, jQuery.

b. Free Software

Free 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 regardless of how much is paid to obtain the program. Computer programs are deemed "free" if they give end-users ultimate control over the software and, subsequently, over their devices. The right to study and modify a computer program entails that source code—the preferred format for making changes—be made available to users of that program.

Eg.: Linux kernel, BSD and Linux operating systems, GNU Compiler Collection and C library, MySQL relational database, Apache web server, Sendmail mail transport agent.

c. Difference between Free & Open Source Software

Free Software	Open Source Software
Freedom to run program for any purpose.	It has distribution of license.
Freedom to study about program.	Availability of source code.
Freedom to distribute copies of software.	Free distribution.
Freedom to modify/improve program & release improvements to public.	Integrity of author's source code.
Free software focuses on providing a moral/ethical argument for open source.	Open source tends to focus on providing an economic/business argument for free software.
Eg.: Linux kernel.	Eg.: Mozilla Firefox.