

**TITLE: BASIC UNDERSTANDING ON FREE AND OPEN SOURCE SOFTWARE**

A) Describe open source software with examples ?

Answer:- 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.

Example :- GNU/Linux

Mozilla Firefox.

VLC media player.

Sugar Cms.

GIMP.

VNC.

Apache web server.

Libre Office.

J Query.

B ) Describe free source software with examples ?

Answer:- Free software is software that can be freely used, modified, and redistributed with only one restriction: any redistributed version of the software must be distributed with the original terms of free use, modification, and distribution (known as copy left). The definition of free software is stipulated as part of the GNU Project and by the Free Software Foundation. Free software may be packaged and distributed for a fee; the "free" refers to the ability to reuse it, modified or unmodified, as part of another software package. As part of the ability to modify, users of free software may also have access to and study the source code. The concept of free software is the brainchild of Richard Stallman, head of the GNU Project. The best known example of free software is Linux, an operating system that is proposed as an alternative to Windows or other proprietary operating systems. Debian is an example of a distributor of a Linux package. Free software is easily confused with freeware, a term describing

software that can be freely downloaded and used but which may contain restrictions for modification and reuse.

Example :- There are thousands of free applications and many operating systems available on the Internet. Users can easily download and install those applications via a package manager that comes included with most Linux distributions. 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. Other influential examples include the Emacs text editor; the GIMP raster drawing and image editor; the X Window System graphical-display system; the Libre Office suite; and the TeX and LaTeX typesetting systems.

C) Difference between free and open source software? Answer:-

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 Send 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 OS Commerce, 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 Libre Office.

