

# PRACTICAL 3

## BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

### A) Describe Open Source Software with Example.

=> Open source software is a type of computer software in which source code is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software to anyone and for any purpose.<sup>[1]</sup> Open-source software may be developed in a collaborative public manner. Open-source software is a prominent example of open collaboration .

EXAMPLE:-

1. MOZILA FIREFOX :- Mozilla Firefox is a customizable internet browser and a free open source software. It offers thousands of plugins that are accessible with a single click of your mouse.
2. LIBRE OFFICE :- Libre Office is a complete office suite that offers presentations, documents, spreadsheets and databases. Unlike Microsoft Office, which is not accessible for everyone due to its pricing model, Libre Office is totally free.
3. VLC MEDIA PLAYER :- This multimedia player is used for video, media and audio files and it plays discs, webcams, streams and devices. Most of the users use it for streaming podcasts as well.

## **B) Describe Free Software with Example.**

**=>**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 copyleft). The definition of free software is stipulated as part of the GNU Project and by the Free Software Foundation. Free software may 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.

### **EXAMPLE:-**

1. **LINUX KERNEL:-** The Linux kernel is protected by the GPL, and is used daily by millions of people throughout the world. As the kernel, it is one of the most important components of the GNU system.
2. **APACHE:-** the most widely used web server in the world. More than 56% of the web servers on this planet use Apache; far more than its fierce competitors, Microsoft and Netscape
3. **THE GIMP:-** is a powerful bitmap mode digital creation program. In spite of being relatively new, The Gimp has rapidly become serious competition for Photoshop
4. **POSTGRESQL:-** is an object-relational database. It is currently the most sophisticated free software database available.

c) **Difference between Free and Open Source Software.**

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<b>FREE SOURCE SOFTWARE</b>	<b>OPEN SOURCE SOFTWARE</b>
The freedom to deploy the software for any use case without any restrictions. For example, saying that the license of a program expires after 30 days makes it non-free.	Free redistribution of the software. The source code should be publicly available
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.
The freedom to freely re-distribute the software to assist someone in need. The redistribution can be done at a cost or at no cost.	The software should not discriminate against persons or groups.
The freedom to enhance the performance of the software and release your enhancements for the community to benefit—both programmers and non-programmers. You can do this at a cost or at no cost.	The software should not restrict the usage of other software.