### PRACTICAL:-3

# BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

## a) Describe Open Source Software with Example.

Open-source software (OSS) is any computer software that's distributed with its source code available for modification. That means it usually includes a license for programmers to change the software in any way they choose: They can fix bugs, improve functions, or adapt the software to suit their own needs.

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. Open-source software may be developed in a collaborative public manner. Open-source software is a prominent example of open collaboration.

#### **Example:**

Firefox - A Web browser that competes with Internet Explorer.

**Zimbra** - open source e-mail software that competes with Outlook server.

**VLC Media Player** - VLC Media Player is one of the most popular open source software examples that you can use for free.

**Linux** - Linux is one of the most user-friendly open source software on the market.

## 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.

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.

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:**

**The Linux kernel** - The Linux kernel is protected by the GPL, and is used daily by millions of people throughout the world.

**Apache**- Apache is the most widely used web server in the world.

**Gimp** - Gimp is a powerful bitmap mode digital creation program.

PostgreSQL - PostgreSQL is an object-relational database.

# c) Difference between Free and Open Source Software.

| Sr No. | Free Source Software  | <b>Open Source Software</b>   |
|--------|---|---|
| 1.     | freeware refers to a software that you can use without incurring any costs.                 | Open source commonly refers to software that uses an open development process and is licensed to include the source code. |
| 2.     | Software freedom translates to social freedom.  | Ethics are to be associated to the people not to the software.  |
| 3.     | Free Software is Open Source Software.  | Open Source software may not necessarily be Free Software.  |
| 4.     | Free Software cannot work with other proprietary software.                                  | Open Source software can work with other proprietary software.  |
| 5.     | Examples: The Free Software Directory maintains a large database of free-software packages. | · ·   |