PRACTICAL 3:

BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

a) Describe Open-Source Software with Example

Open-source software also called as OSS 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

Open-source software is usually easier to obtain than proprietary software, often resulting in increased use.

Open-source code is usually stored in a public repository and shared publicly.

Anyone can access the repository to use the code independently or contribute improvements to design and functionality of overall project

These are the some reasons why open-source software is used:

- Security
- Affordability
- Transparency
- Perpetuity
- Interoperability
- Flexibility
- Localization

Here are some most popular examples of open-source software:

- 1)Firefox is a Web browser which is competing with Internet Explorer
- 2) OpenOffice a competitor to Microsoft Office
- 3) Gimp is a graphic tool with features found
- 4) VLC media player is one of the most popular open-source software examples which is commonly used now –a-days

b) Describe Free Software with Example

Free software is a software that can be freely used, modified and redistributed with only one restriction any redistributed version of software must be distributed with original terms of free use

The definition of software is stipulated as part of the GNU project and by the Free Software Foundation

According to the definition as presented by the Free Software Foundation, the word Free in "free software" implies the idea of freedom rather than not having a cost.

If software is available to be downloaded without being paid for, but the user is not able to modify the source then it is not free software

Free software is software you are free to modify and use for your own purposes

Free software does not means non commercial

On the contrary, a free program must be available for commercial use, commercial development, and commercial distribution.

Example for Free Software are:

- 1. LINUX: is one of the most popular free software used by millions of the people
- 2. PostgreSQL: is an object-relational database. It is currently the most sophisticated free software database available.
- 3. Apache: is the most widely used web server in the world. More than 56% of the web servers on this planet use Apache
- c) Difference between Free and Open-Source Software.

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

When we say Open Source, source code of software is available publicly with Open-Source licenses like GNU (GPL) which allows you to edit source code and distribute it.

Free software is matter of liberty and not of price whereas open-source software does not just mean access to the source code

Open-source software license criteria focus on the availability of the source code and the ability to modify and share it, while free software focus on the user's freedom to use the program, to modify it, and to share it

These terms are used to compare legal attributes of open-source and free software and other content publicly available licensing to proprietary licenses.