Practical 3

Title: Basic Understanding on Free and Open-Source Software

a) Describe Open-Source Software with example.

Open-Source Software:-Open-source software (OSS) is computer software that is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software and its source code 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, meaning any capable user is able to participate online in development, making the number of possible contributors indefinite. The ability to examine the code facilitates public trust in the software.

Open source code can be used for studying and allows capable end users to adapt software to their personal needs in a similar way user scripts and custom style sheets allow for web sites, and eventually publish the modification as a fork for users with similar preferences, and directly submit possible improvements as pull requests.

Example:

1. Magento
2. Mozilla Firefox
3. Mozilla Thunderbird
4. FileZilla
5. GnuCash
6. Audacity

b) Describe Free Software with Example

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 (including profiting from them) regardless of how much is paid to obtain the program. Computer programs are deemed "free" if they give end-users (not just the developer) ultimate control over the software and, subsequently, over their devices.

Users of free software may have access to and study the source code as part of their ability to modify it. 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. While this is often called "access to source code" or "public availability", the Free Software Foundation (FSF) recommends against thinking in those terms, because it might give the impression that users have an obligation (as opposed to a right) to give non-users a copy of the program.

Example:

1.Linux kernal

2.The BSD and Linux Operating Systems

3.The GNU compiler collection and C library

4.The MySQL relational database

5.The Apache Web Server

6.The Sendmail mail Transport agent

c) Difference Between Free and Open-Source Software

Free Software	Open Source Software
1.Free Software usually refers open source under GNU GPL license. Because the word free in English means cost the terms open source was created.	1.Your source code is accessible to anyone to read and modify and redistribute depending on license conditions. Publishing source code online without the public being able to modify them doesn't make lots of sense.
2.Software is an important part of people's lives.	2.Software is just software. There are no ethics associated directly to it.
3.Software freedom translates to social freedom	3.Ethics are to be associated to the people not to the software
4.Users of free software may have access to and study the source code as part of their ability to modify it.	4.Open source code can be used for studying and allows capable end users to adapt software to their personal needs
5.Freedom to run program for any purpose	5.It has distribution of licence
6.Freedom to distribute copes of software	6.Free distribution
7.Free software is a social movement	7.Open software is a development methodology
8.Free software focuses on providing a moral/ethical argument for open source	8.Open source tends to focus on providing an economic/business argument for free software
9.Using free software is a good, morally right thing to do	9.Using open source software is beneficial to you and your business
10.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;	10.Examples: Prime examples of open-source products are the Apache HTTP Server, the ecommerce platform os Commerce, internet browsers Mozilla Firefox