PRACTICAL 3

PRACTICAL 3: BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

a) *Describe Open Source Software with Example.*

Open-**source software** (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 public manner.

- **Firefox—a Web browser that competes with Internet Explorer**
- **OpenOffice—a competitor to Microsoft Office**
- **Gimp—a graphic tool with features found in Photoshop**
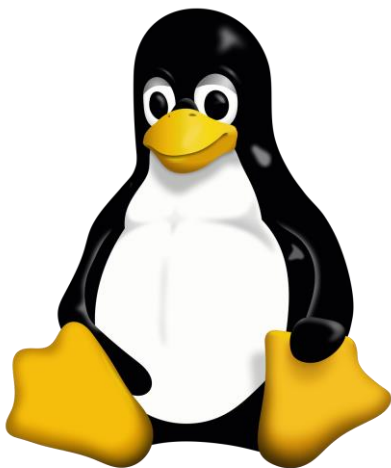- **Alfresco—collaboration software that competes with Microsoft Sharepoint and EMC's Documentum**

b) *Describe Free Software with Example*

"Free software" means software that respects users' freedom and community. Roughly, it means that the users have the freedom to run, copy, distribute, study, change and improve the software. Thus, "free software" is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech," not as in "free beer". We sometimes call it "libre software," borrowing the French or Spanish word for "free" as in freedom, to show we do not mean the software is gratis.

A program is free software if it gives users adequately all of these freedoms. Otherwise, it is nonfree. While we can distinguish various nonfree distribution schemes in terms of how far they fall short of being free, we consider them all equally unethical.

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.

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

Free Software:
"Free software" means software that respects users' freedom and community. Roughly, it means that the users have the freedom to run, copy, distribute, study, change and improve the software.
The term "free software" is sometimes misunderstood—it has nothing to do with price. It is about freedom.

1. *Free Software is an important part of people's lives.*
2. *Free 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 Sendmail mail transport agent.*

Open Source Software :
Open Source Software is something which you can modify as per your needs, share with others without any licensing violation burden. 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. Read these licenses and you will realize that these licenses are created to help us.
1. *Coined by the development environments around software produced by open collaboration of software developers on the internet.*
2. *Later specified by the Open Source Initiative (OSI).*
3. *It does not explicitly state ethical values, besides those directly associated to software development.*

4. *OpenSource Software is just software. There are no ethics associated directly to it.*

5. *Freedom is not an absolute concept. Freedom should be allowed, not imposed.*

6. *Examples: Prime examples of open-source products are the Apache HTTP Server, the e-commerce platform osCommerce, 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 LibreOffice.*