PRACTICAL3: Basic understanding on free and open source software

1)Describe open source with example.

Open source software is software with source code that anyone can inspect, modify, and enhance.

"Source code" is the part of software that most computer users don't ever see; it's the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly.

Reasons to prefer open source software:

Control: Many people prefer open source software because they have more control over that kind of software. They can examine the code to make sure it's not doing anything they don't want it to do, and they can change parts of it they don't like. Users who aren't programmers also benefit from open source software, because they can use this software for any purpose they wish—not merely the way someone else thinks they should.

Training: Other people like open source software because it helps them become better programmers. Because open source code is publicly accessible, students can easily study it as they learn to make better software. Students can also share their work with others, inviting comment and critique, as they develop their skills.

Security: Some people prefer open source software because they consider it more secure and stable than proprietary software. Because anyone can view and modify open source software, someone might spot and correct errors or omissions that a program's original authors might have missed. And because so many programmers can work on a piece of open source software without asking for permission from original authors, they can fix, update, and upgrade open source software more quickly than they can proprietary software.

Stability: Many users prefer open source software to proprietary software for important, long-term projects. Because programmers publicly distribute the source code for open source software, users relying on that software for critical tasks can be sure their tools won't disappear or fall into disrepair if their original creators stop working on them. Additionally, open source software tends to both incorporate and operate according to open standards.

Community: Open source software often inspires a community of users and developers to form around it. That's not unique to open source; many popular applications are the subject of meetups and user groups. But in the case of open source, the community isn't just a fanbase that buys in)to an elite user group; it's the people who produce, test, use, promote, and ultimately affect the software they love.

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.

2)Describe free source 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.

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

Typically, freeware refers to a software that you can use without incurring any costs. Unlike open source software and free software, freeware offers minimal freedom to the end user.

Whereas it can be used free of charge, often modification, redistribution, or other improvements cannot be done without getting permission from the author.

As such, freeware is often shared without including its source code, which is atypical to open source software or free software.

Two of the most common types of freeware are Skype and Adobe Acrobat Reader. While both programs are free to use, their source codes are unavailable to the public.

Most developers usually market freeware as freemium or shareware with the intention of encouraging users to buy a more capable version.

Freemium refers to a program that is offered at no cost, but money is paid for extra, more capable features.

Shareware refers to a program that is initially available without any costs attached, and users are encouraged to distribute copies. However, that cost-free period usually lasts for a certain period; thereafter, a user is required to pay for continued use.

Examples: Prime examples of open-source products are the Apache HTTP Server, the ecommerce platform osCommerce, internet browsers Mozilla Firefox and Chromium and the full office suite LibreOffice.

3)Difference between free source and open source software?

FREE SOFTWARE	OPEN SOURCE SOFTWARE
Software is an important part of people's lives.	Software is just software. There are no ethics associated directly to it.
Software freedom translates to social freedom.	Ethics are to be associated with people not with the software.
Freedom is a value that is more important than any economical advantage.	Freedom is not an absolute concept. Freedom should be allowed, not imposed.
Examples: Prime examples of open-source products are the Apache HTTP Server, the e-commerce platform os Commerce, 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 Libre Office.	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.