**Practical 3: UNDERSTANDING ON FREE AND**

**OPEN-SOURCE SOFTWARE**

1. *Describe open Source software with Example :*

*Ans:*

[Open-source software (OSS)](https://www.thebalancecareers.com/faqs-about-public-domain-software-and-where-to-find-it-3515324) 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.

In short, an *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, 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.*

* *Examples of Open Source Software :*
* Mozilla's Firefox web browser
* Thunderbird email client
* [PHP](https://www.thebalancecareers.com/websites-for-learning-php-2071891) scripting language
* Python [programming language](https://www.thebalancecareers.com/high-paying-programming-languages-2071890)
* Apache HTTP web server

1. *Describe Free software with example :*

*Ans:*

“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.

When users don't control the program, we call it a “non-free” or “proprietary” program. The non-free program controls the users, and the developer controls the program;

For software under the purview of [copyright](https://en.wikipedia.org/wiki/Copyright) to be free, it must carry a [software license](https://en.wikipedia.org/wiki/Software_license) whereby the author grants users the aforementioned rights. Software that is not covered by copyright law, such as software in the [public domain](https://en.wikipedia.org/wiki/Public_domain), is free as long as the source code is in the public domain too, or otherwise available without restrictions.

* *Examples of free software:*
* The Linux kernel
* Apache
* Gimp
* PostgreSQL

1. *Difference between free and open source software :*

*Ans:*

* "Open source is a development methodology; free software is a social movement." Nevertheless, there is significant overlap between open source software and free software.
* the term "open source" fosters an ambiguity of a different kind such that it confuses the mere availability of the source with the freedom to use, modify, and redistribute it.

On the other hand, the "free software" term was criticized for the ambiguity of the word "free" as "available at no cost", which was seen as discouraging for business adoption, and for the historical ambiguous usage of the term.

* open source tend to focus on providing an economic/business argument for free software where as free software focuses on providing a moral/ethical arguments for open source.
* Using/providing open source software is beneficial to you and your business where as using/providing free software is good ,morally right, thing to do