**PRACTICAL NO – 3**

**BASIC UNDERSTANDING ON FREE AND OPEN- SOURCE SOFTWARE**

1. **Describe Open Source Software with Example.**

* Open-source software (OSS) is a type of a 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 development can bring in diverse perspective beyond those of a single company.
* A report by standish group stated that adoption of open- source software model has resulted in saving of about 60 billion per year for consumers.
* The major examples include as follows:
* Firefox – a web browser that competes with internet explorer.
* Open office – a competitor to Microsoft office.
* Gimp – a graphical tool with features found in photoshop.
* Alfresco – collaboration software that competes with Microsoft share point and EMC’s documentum.
* Marketcetera – an enterprise trading platform for hedge fund manager that competes with FlexTrade and Portware.
* Zimbra – open- source email software that competes with outlook server.
* SugarCRM – customer relationship management software that competes with salesforce.com and Siebel.
* Asterix – an open- source implementation for running a PBX corporate telephony system.
* Free BSD and Sun’s Open Solaris – open source version of the Unix operating system.

1. **Describe Free Software with Examples.**

* Free software means software that respects user’s freedom and community.
* Roughly it means that the users have have the freedom to run, copy, distribute, study, change and improve the software.
* The first term software is sometimes misunderstood it has nothing to do with price, it is about freedom.
* The examples of free software’s license are given as follows:
* Apache License.
* BSD License.
* GNU general public license.
* GNU lesser general public license.
* MIT license.
* Eclipse public license.
* Mozilla public license.

1. **Difference Between Free AND Open Source Software.**

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| **FREE SOURCE SOFTWARE** | **OPEN- SOURCE SOFTWARE** |
| 1)The freedom to deploy the software for any use case without any restrictions. | 1)Free distribution of software’s. |
| 2)The freedom to study how the software works and modify it according to their needs and preferences. | 2)The source code should be publicly available. |
| 3)The freedom to freely redistribute the software to assist someone in need. | 3)The software can be modified and distributed in a different format from the original software. |
| 4)The freedom to enhance the performance of the software for the community to benefit both the programmers. | 4)The software should not discriminate against persons or groups. |
| 5)The redistribution must be done at a cost or no cost. | 5)The software should not discriminate the usage of software. |