

## PRACTICAL NO-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 right 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 perspectives beyond those of a single company.
  - ☐ A report by a British 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.
    - ☐ OpenOffice – a competitor to Microsoft Office.
    - ☐ GIMP – a graphical tool with features found in Photoshop.
    - ☐ Alfresco – collaboration software that competes with Microsoft SharePoint 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.
- ☐ FreeBSD and Sun's OpenSolaris – open-source version of the Unix operating system.

#### B) Describe Free Software with Examples.

- ☐ Free software means software that respects user's freedom and community.
- ☐ Roughly it means that the users 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.

C) Difference Between Free AND Open Source Software.

FREESOURCE 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 codes 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.