

## ASSIGNMENT-1

Q1. Difference between open source and free source

Ans	Free Source	Open source
1>	Free source usually refers open source <del>because</del> under GNU <del>&amp;</del> GPL license. Because the word free in english <del>means</del> means cost the terms open source was created	Your source code is <del>ex</del> accessible to anyone to read and modify and redistribute depending on license conditions. <del>pubb</del> publishing source code online without public being able to modify them doesn't make lots of sense.
2>	Software is an important part of people's lives	Software is just <del>soft</del> software. There are no ethics associated directly to it.
3>	Software freedom translate to social freedom.	Ethics are to be associated to people not to the software.
4>	Users of free software may have access to and study the source code as part of their ability to modify it.	Open source code can be used for studying and allow capabilities and users to adopt software to their personal needs.
5>	Freedom to run program for any purpose	It has distribution of license.
6>	Freedom to distribute copies of software	Free distribution
7>	Free software focuses on providing a <del>more</del> moral/ethical argument for open source	Open <del>src</del> source tends to focus on providing an economic/business arguments for free software
8>	Free <del>source</del> software is a social movement	Open software is a <del>dev</del> development methodology.



Q2) Explain the significance of Green computing

Ans. Green computing is the ~~envion~~ environmentally responsible and eco-friendly use of computers and their resources. In broader terms, it can also be defined as the study of designing, engineering, manufacturing, using and disposing of computing devices in a way to reduce their environmental impact. 'green computing' refers to the adoption of a sustainable business landscape in designing manufacturing use and disposal of various resources related to IT. Green computing is essentially an environmentally friendly use of IT technology to integrate to lessen the burden on the planet. As technology integrates seamlessly into various aspects of life, research into green computing requires catering to the specific and disparate needs of each sector. Cloud computing the resultant cloud data centres (CDC) ~~strong~~ enable strong of large data through virtualization of physical resources.

- Green use ÷ Minimizing the electricity consumption of computing and their peripheral devices and using them in an eco-friendly.
- Green disposal ÷ Repurposing existing equipment or disposing of or recycling, unwanted electronic equipment.
- Green design ÷ Designing energy-efficient computers, servers, printers, projectors and other digital devices.
- Green manufacturing ÷ Minimizing waste during the manufacturing of computers and other subsystems to reduce the environment impact of these activities.



Q3. What is github? Explain the advantages of using github. Give steps of creating and cloning repository on github.

Ans. What is github

GitHub, Inc. is a provider of internet hosting of software development and version control using Git. It offers the distributed version control and source code management (SCM) functionality of Git, plus its own features. It provides access control and several collaboration features such as bug tracking, features request, task management, continuous integration and wikis for every project.

#### \* Advantages

- 1) It's free and it is open source: github is completely free and you can use it without paying and since it is an open source you can download the source code and can make change as per the requirement.
- 2) It is fast: Since most of the operations are performed locally, it allows huge benefits in terms of speed.
- 3) It provides good backup: Here chance of losing data is very low as it provides the multiple copies of it.
- 4) Multiple developers can work: Github allows multiple developers to work on a single project at a time. It helps all the team members to work together on a single project at a time from different location.

#### \* Steps of creating and cloning repository.

##### • Creating repository

Step 1: login to github account

Step 2: Click on (+) sign to create repository account created



Step 3 ÷ To create new repository → click on new repository

Step 4 ÷ Create repository dialog box will appear

Step 5 ÷ Give the repository name and click create repository button repository created.

- Cloning repository.

To clone repository, copy the link and share it.

Q.4 Differentiate between Tools and Technologies.

Ans A tool is generally a resource, an apparatus that is used to aid a person in completing a task. A tool is a device or computer app that enables you to do something for example a microscope or a modeling program. Techniques are essentially methods that the person uses in order to effectively complete a task. A technique is a process or procedure that you follow. For example ÷ These are guidelines for how to construct no effective scientific experiment as such as you normally ensure the participants are unbiased.

Q.5 Explain the features and working of any tool used in online teaching and learning process.

Ans

Google Meet

Features ÷

1) Two-way and multi-way audio and ~~via~~ video calls with a resolution up to 720p

2) Call encryption between all users

3> Ability to ~~call~~ call into meeting using a dial-in number in the US

4> Video filters, effect and augmented reality masks.

5> Ability to join meeting through a web browser or through Android or iOS apps.

### Working Process

a) Go to [meet.google.com](https://meet.google.com)

b) Click start new meeting, or enter your meeting code.

c) Choose the Google account you ~~meetin~~ want to use.

d) Click Join meeting.