Name:Sharvari Y. Patil
PRN NO:2020BTECS00077

Software Engineering Tools Lab

Assignment No-1

(Module 1- Introduction to FOSS)

1. Differentiate in between free software, Open source software and proprietary software with respect to its properties.

Free Software:

Free Software refers to freedom, not price. It guarantees its users the essential four freedoms. The absence of at least one of these freedoms means an application is proprietary, so non-Free Software.

Use

Free Software can be used for any purpose and is free of restrictions such as licence expiry or geographic limitations.

Study

Free Software and its code can be studied by anyone, without non-disclosure agreements or similar restrictions.

Share

Free Software can be shared and copied at virtually no cost

Open-Source Software:

It all started with Richard Stallman who developed the GNU project in 1983 which fueled the free software movement which eventually led to the revolutionary open-source software movement. The idea is to release the software under the open licenses category so that anyone could see, modify, and distribute the source code as deemed necessary. Any software under the open source license is intended to be shared openly among users and redistributed by others as long as the distribution terms are compliant with the OSI's open source definition. Programmers with access to a program's source code are allowed to manipulate parts of code by adding or modifying features that would not have worked otherwise.

Proprietary Software:

Unlike open source, there are some software the source code of which can only be modified by the individual or organization who created it. The owner or publisher of the software holds intellectual property rights of the source code exclusively. We call this type of software "proprietary software" because only the original owner(s) of the software are legally allowed to inspect and modify the source code. Unlike open source software, the internal structure of proprietary software is not exposed and the restrictions are imposed upon the users by the

Name:Sharvari Y. Patil
PRN NO:2020BTECS00077

End User License Agreement. Examples of proprietary software include iTunes, Windows, macOS, Google Earth, Unix, Adobe Flash Player, Microsoft Word, etc.

2. Enlist some examples along with its purpose and properties (at least 10) of FOSS and proprietary software with respect to database.

FOSS:

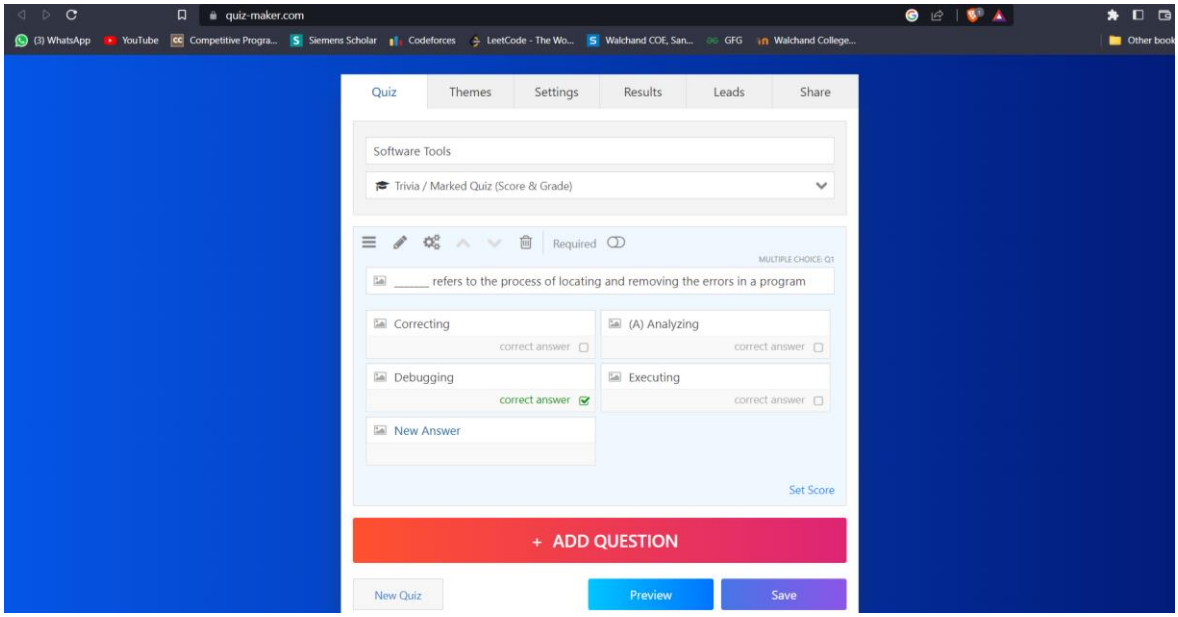
FOSS means Free and Open Source Software. It doesn’t mean the software is free of cost. It means that the software's source code is open for all and anyone is free to use, study and modify the code. This principle allows others to contribute to developing and improving a software like a community.

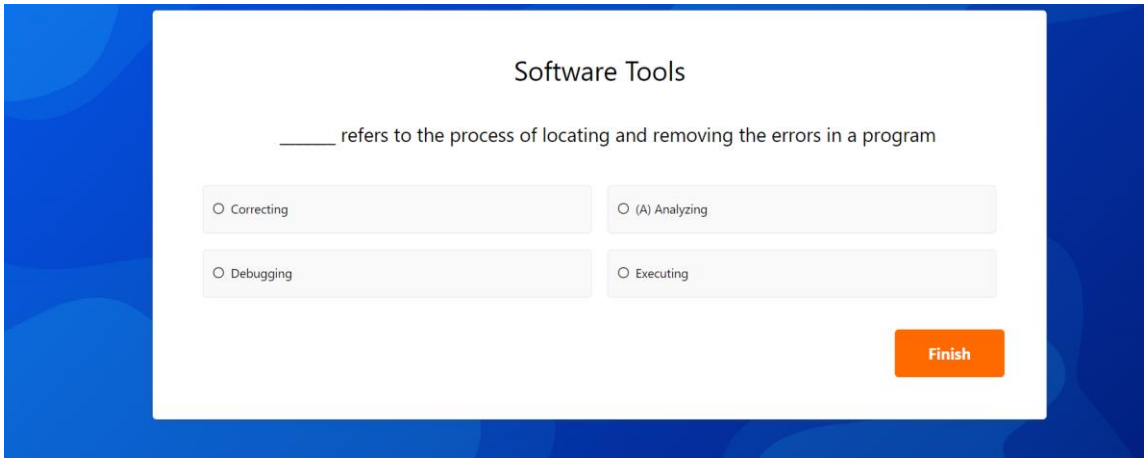
3. Enlist some examples of free open source exam software for online assessment.

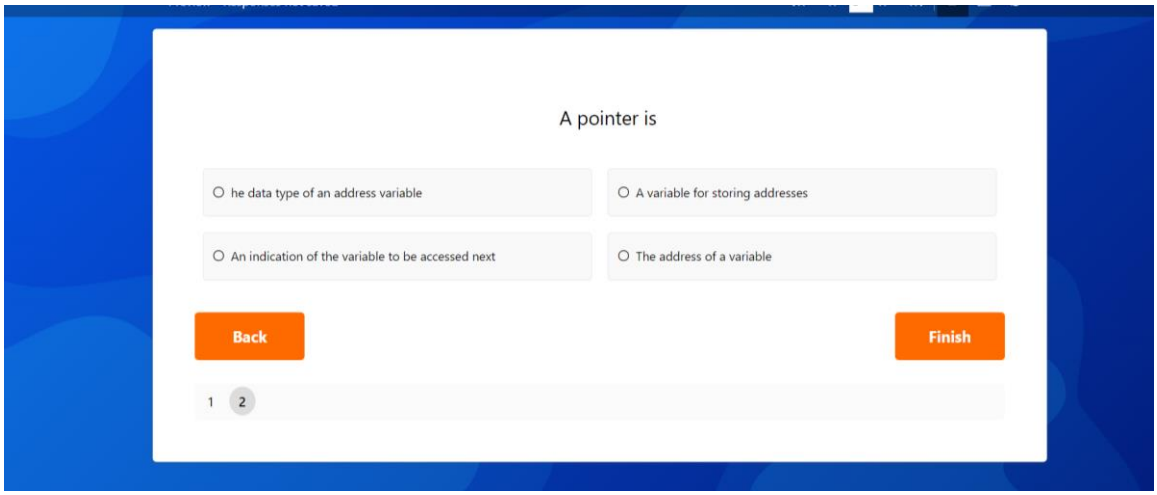
- TCExam
- VirtualX
- Moodle
- TAO
- Kaldin
- Papershala
- Edbase
- Mettl
- FlexiQuiz
- Eklavvya
- Think Exam

Name:Sharvari Y. Patil
PRN NO:2020BTECS00077

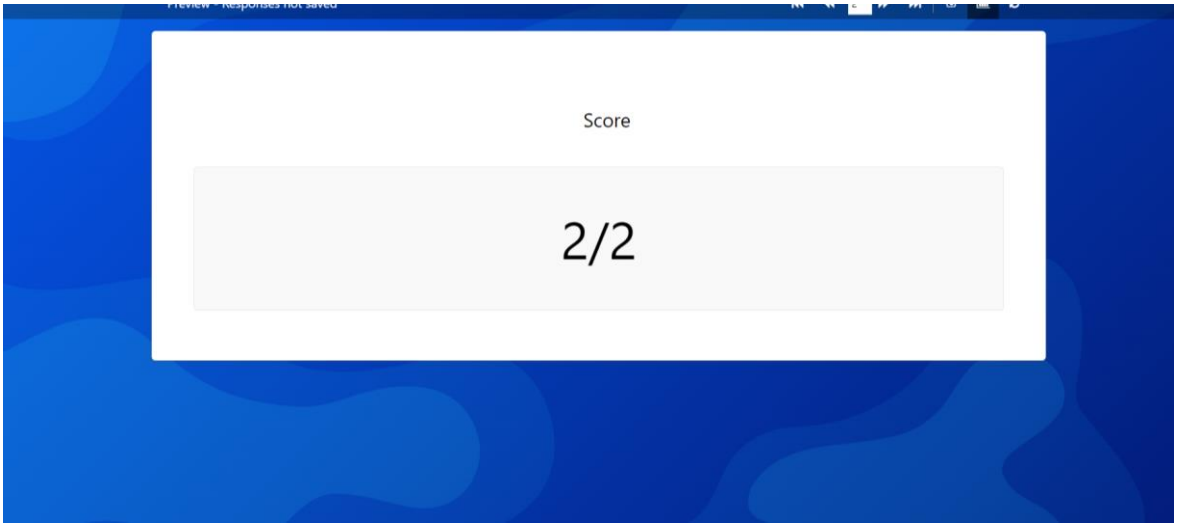
4. Demonstrate any one exam software which is open source and freely available.



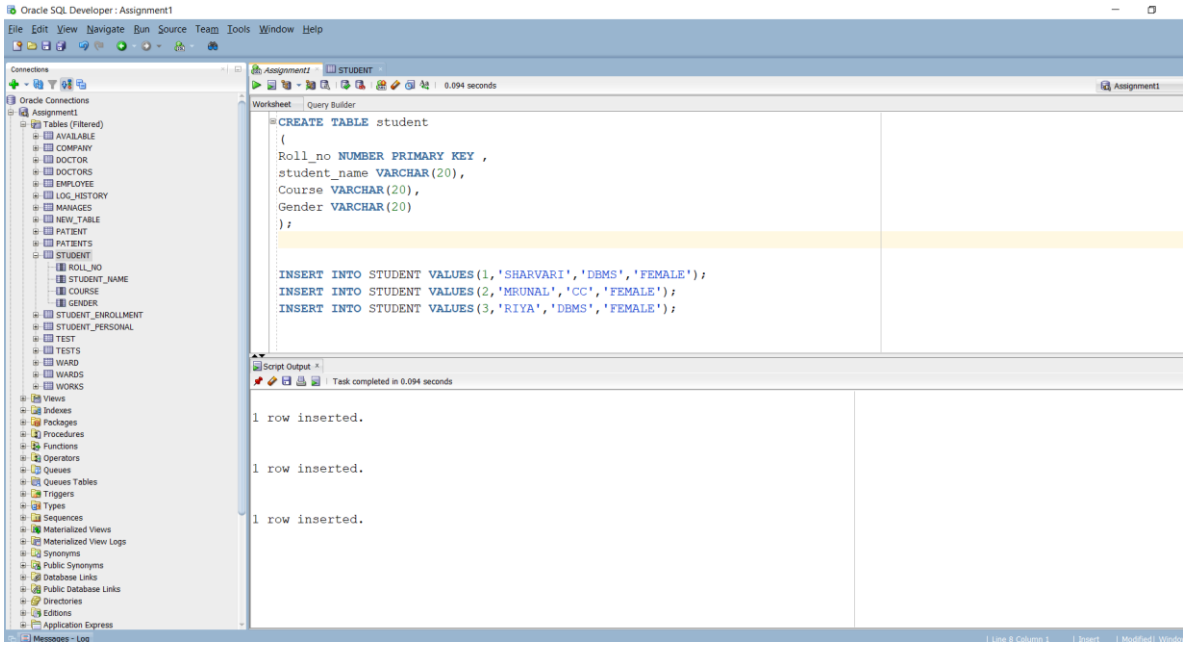




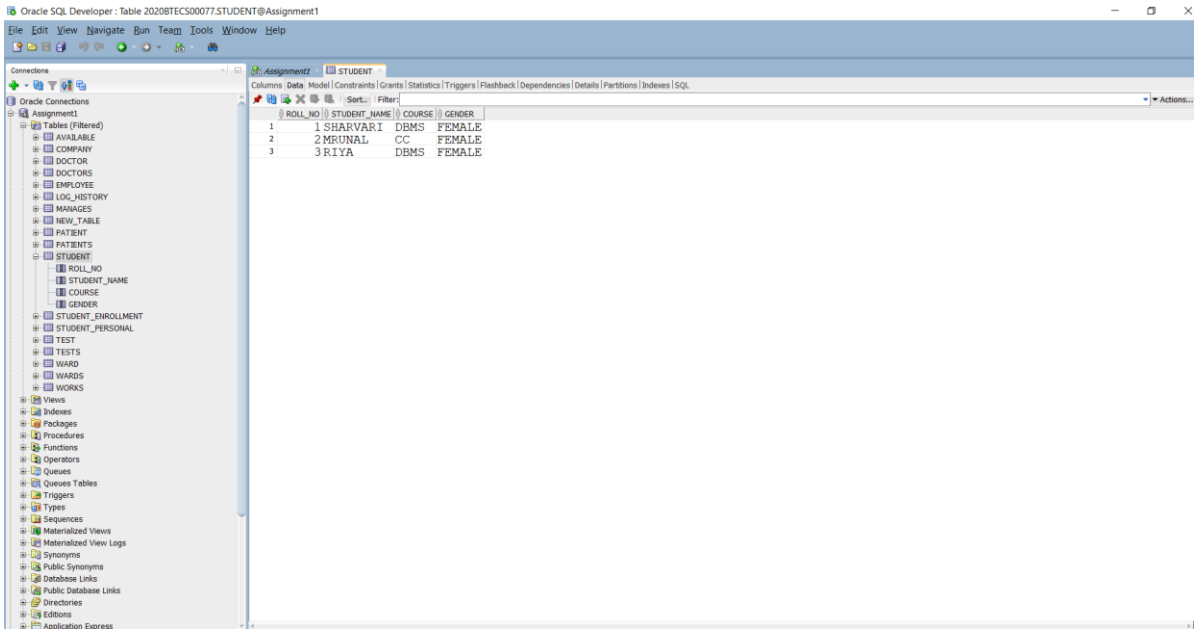
Name:Sharvari Y. Patil
PRN NO:2020BTECS00077



5. Demonstrate FOSS software related to database.



Name:Sharvari Y. Patil
PRN NO:2020BTECS00077



6. How does the Exam software work?

The best online examination software helps with the following procedures:

- **Students' Registration**

Online exam software helps with the registration process of students and generates unique IDs for them.

- **Test Paper Creation**

You can create a subjective, objective, multiple-choice, and other types of questions online and ensure zero spam.

- **Take Tests Anytime, Anywhere**

Students can take tests from anywhere with a stable internet connection and a system. Similarly, teachers can invigilate directly through the system.

- **Automated Evaluation**

Teachers don't need to evaluate answers manually, as the exam software helps analyze students' performance digitally.

- **Track Students' Progress**

YouTube broadcast software enables users to list their live streams as videos on their channels. This way the live stream can be seen even after it ended.

- **Data analysis**

The performance reports include detailed info about the strengths and weaknesses of every student. Accordingly, teachers can make the improvement plan.