For this activity please answer the following questions below. Be sure to use complete sentences and proper grammar. Keep your answers concise and always cite your source where you get the information from. This activity is worth 10 pts and to be completed by Wednesday, September 23, at 11:59 pm EST.

Q1: What is GNU GPL? Are you allowed to modify, brand, and sell a software product that is published by someone else under the GNU GPL license?

GNU is the acronym of GNU Not Unix, a project initiated in 1983 aiming to create a complete free, Unix-style Operating System, GNU GPL is General Public License a license type adopted in GNU. GUN GPL gives everyone the permissions to copy, modify and distribute a software under the GPL, and the new copy must follow the same rule to allow others the same access.

Yes, I can modify, brand, and sell a GNU GPL-licensed software, as the license type only requires my version of the software to be open-sourced allowing freedom of copying, modification, and distribution to everyone.

Reference - <https://www.gnu.org/licenses/gpl-3.0.en.html>

Q2: Github.com – What is it? Create your own free student account (consider the student pack) and provide the link to your projects page. (Tip: you could use this link on your Resume to share your projects portfolio with future employers).

It is the most popular source code repository for software development with version control by Git.

My GitHub account switched to student Pro plan - <https://github.com/fanchuanster>

Q3: How many lines of code in the latest Windows version? (be sure to cite your source!)

I searched the internet and found no definite answer to this question. Microsoft has not published in this regard on the latest Windows version Windows 10; Some forum posts allege it is around 50 million lines, but these are just personal judgement that not confirmed by the producer Microfocus.

References - <https://www.quora.com/How-many-lines-of-code-does-Windows-10-contain>

<https://answers.microsoft.com/en-us/windows/forum/all/windows-10-lines-of-code/a8f77f5c-0661-4895-9c77-2efd42429409#:~:text=There%20is%20approx.,Code%20in%20Windows%2010%20.%20.%20.&text=Power%20to%20the%20Developer>!

Q4: What is the underlying architecture of Facebook.com?

I think it is a Distributed web system across networks, as it has a large quantity of users across globe, to excel in performance, must have many servers distributed in various areas.

Q5: What is the underlying architecture of Apple SIRI?

It should be client-server architecture. Client is the native SIRI application on mobile device, and the server side is literally a distributed cluster of servers across networks.

Reference - <https://discussions.apple.com/thread/8253953#:~:text=Siri%20doesn't%20work%20offline.&text=That%20will%20let%20you%20still,will%20require%20an%20internet%20connection>.

Q6: What is Eclipse (from eclipse.org)?

Eclipse is a free integrated development environment initially and mainly for Java development, but lately it added support for other languages like C/C++, PHP and so on. It is open for extensibility and customization where many useful plug-ins have been created by the vast community, what’s more, you can create your own extension to meet your need.

Reference - <https://www.eclipse.org/ide/>

Q7: What is BlueJ (from bluej.org)?

BlueJ is a free Development Environment specifically for Java, designed for teaching but can be applied to small projects as well, especially useful or beginners.

Reference - <https://www.bluej.org/about.html>

Q8: What is your current location (in Longitude and Lattitude)?

My current location is my sensitive personal information, I would like to keep it private unless you told me the purpose of your question, I will not consider exposing it.

Q9: What are the ethical issues that you think need to be considered before asking question 8 above? Consider a software developer who would be using that location information for a custom mapping application of student locations. It is ok to just collect and use the data as we please just because we know how to program?

Before asking the question, I need to be honest about the reason why I need that information, and bear in mind that current location is something private and sensitive that I need to respect, also need to consider how to keep it secure once permitted by user.

No, we cannot just collect without users’ permission according to the Code of the industry.

Q10: What should the correct answer be for Q9 to be compliant with the REB policies? see here: <https://www.uwindsor.ca/research-ethics-board/>

The correct answer is we need to be faithful about the purpose of the question and to consider how to respect privacy and keep customer’s information secure, we cannot collect without users’ permission or distribute the information beyond our original claimed usage.