

Homework 2 | Research free software/open source software alternatives.

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Part 1

Watch these videos:

- [What is Open Source?](#)
- [Open Source vs. Closed Source Software](#)
- [Open Source Basics | Intel Software](#)

Answer the following question:

1. What are the advantages of open source?
2. What are the basic freedoms that make a software open source?
3. Why do you think people should use the free software/open-source alternative instead of the proprietary version?
4. Watch the following video: [Why is free software important? Richard Stallman - in INT's ENLIGHTENMENT MINUTES](#). Do you agree with Richard Stallman? Do you disagree? Explain your answer.

Part 1:

Q1) What are the advantages of Open Source Software?

1. Open source software is available for anyone to download for free. Individuals can opt for Open Source Software for their needs and save costs. Companies use Open Source Software to save costs on many software fees etc by going for Open Source Software. Like for example, AWS uses Linux and it must be saving them a lot of the costs. Most of the servers in the world use Linux to save costs.
2. Not reinventing the wheel! Open source software allows many developers and companies to build new software and solutions by using existing Open Source Software code, and without having to start from scratch. This saves a lot of development time. Like for example, Android.
3. Major Open Source software are inspected by hundreds of developers around the globe. This makes the software more stable, as any potential bugs are reported very soon and fixed.
4. Open Source software brings new ideas and innovation. One takes an existing code, and modifies it with his/her code. This way, not everyone is starting from scratch if they want to build something. As many of the features are already coded, they take existing code, and put their mix in it. This way, they

can focus on their idea and bring new features/enhancements while reducing the unnecessary time to develop from base and cost.

Q2) What are the basic freedoms that make a software open source?

Open Source software uses free licenses available like Apache. These licenses allow anyone to download the software, inspect, learn from it, add/enhance features or develop his/her own software out of it.

Open Source software allows people to go for free available options which are enough to their needs like VLC and save costs.

Q3) Why do you think people should use the free software/open-source alternative instead of the proprietary version?

Proprietary Software are not free, open source softwares are free. If a free software fulfilling same needs as Proprietary version, then people should use the Open Source version. Pretty much every day to day software have a open source alternative. This way, people can save a lot of costs.

By using open source, people can also opt out of piracy and illegal way of obtaining softwares when they can not pay for it.

Open source software also can not be hidden over having code that leaks user privacy, as the code is public.

Q4) Agree with Richard Stallman? Do you disagree?

Pretty much disagree, let me share points:

1. People have a choice to go for the open source. This does not mean that closed source are bad and they should not be used. One has full right to sell his/her inventions as they have worked on it, put time and effort into making a software. So, they have full right to sell it under legal terms. People use Apple devices, despite being closed source. Why? It is what they feel convenient in, and having quality software and hardware. Apple puts their best effort into making their devices/software, and they have full right to sell it and people pay for it. Apple is not monopolizing the market, as people have choice to go for alternatives anytime they want.

2. Regarding SaaS, being said by Richard Stallman that it's not computing freedom. You have the right to build your own computing platform and you can also opt for paid ones. If every software becomes redistributable, then who is going to make profit? how is anyone going to earn? AWS, Azure, GCP and other cloud companies allowed companies/individuals to build software without having to worry about servers and how their software is going to scale and compute. This has boosted the software innovation, reduced significant cost, time and maintenance. Not everyone can just go out and build their own server, seems unnecessary. If everyone tries to own it's computing, then there will be a lot of hassle like we saw before cloud computing. Everyone will be building their own solutions. If a developer switches job, he/she has to learn all the company's invented solution. People who just want to build specific software will be making their own servers everytime. Having to self maintain these computing platforms is no easy task, and it costs money, time, and manpower.

Part 2: Open Source Alternatives to Closed Source

Application Name	Open Source Alternative	License Used by Alternative
Skype	Signal	Clients: GPLv3, Server: AGPLv3
Photoshop	GIMP	GPLv3+
Microsoft Office	Libre Office	MPLv2.0 (secondary license GPL, LGPLv3+ or Apache License 2.0)
Outlook	Thunderbird	MPL1.1 or GPL-2.0-or-later or LGPL-2.1-or-later
Microsoft Hyper-V	VirtualBox	Base Package (USB support only for USB 1.1): GNU General Public License version 2 (Optionally CDDL for most files of the source distribution), "Extension Pack" (including USB 3.0 support): PUEL