1. Linux is a open source Unix-like computer system built around the Linux Kernel that was created by linus Torvals which can be run on almost all computer architectures. I believe linux is popular because its open source so you have a lot more control over what is going on with your operating system and I have also found that linux is faster at compiling code compared to windows. Linux has been used in a wide variety of hardwares including computers, phones, toasters, routers and servers.
2. Free or Open Source means that anyone can use, copy, or change the software and the source code for the software is also available for everyone. This is significant because that means that people can use this software for there own purpouses such as buisness or just to learn free of charge, and the comunity can help improve the software by adding or improving the code.
3. Some benefits of open source software is that since it is available for everyone you can get a lot of people from different computer specializations working on that software to make it better for free. It can be used for comercial purpose for free. Some drawbacks of open source software is that they can be harder to learn than commercial software because there may not be as good documentation or tutorials available. There could also be some compatibility issues with existing hardware.
4. Apache License 2.0
   1. STDIN (0) – this is used for user input data
   2. STDOUT (1) – this is used to output data
   3. STDERR (2) – this is used to output error messages