***Data Concerns***

Name of the Innovation:  Bittorrent protcol

**Answer two of the three following questions.**

List two concerns related to **data storage** about your chosen computing innovation. One concern must come from an article you have chosen and needs to have the author’s name at the end of the statement in parentheses.

1.  The amount of data required to download and use a torrent file is not much larger than the file outputted when the download is finished.

2. "Any VoIP user or online gamer who has a roommate or a family member who uses BitTorrent knows what a nightmare it is when BitTorrent is in use. The ping goes through the roof and it stays there making VoIP packets drop out and game play impossible." This is more of a problem with latency but still affects how fast data is store to a computer.

(George Ou) <https://tech.slashdot.org/story/08/06/01/2225228/why-bittorrent-causes-latency-and-how-to-fix-it>

List two concerns related to **data security** about your chosen computing innovation. One concern must come from an article you have chosen and needs to have the author’s name at the end of the statement in parentheses.

1.  Securing the rights to torrent files is nearly impossible so copyrighted materials which are shared on the protocol are impossible to control.

2.  “Many opponents of P2P file sharing claim uploading a torrent opens a gateway to a PC’s other stored data. This claim can be especially troubling to business owners, who fear employee files, payroll information and other valuable company data may be compromised. However, this is only true if that data is kept in the same folder as the torrent being uploaded. Because files downloaded through torrent sites are then passed along to other users, by default they’re stored in a folder that allows its content to be shared. So, unless you’re in the habit of storing critical business data in your computer’s torrent download folder, your company secrets should be secure. Still, for safety’s sake, it’s a good idea to turn off sharing for personal folders.”

(John Machay) <http://smallbusiness.chron.com/dangers-torrents-70661.html>

List two concerns related to **data privacy** about your chosen computing innovation. One concern must come from an article you have chosen and needs to have the author’s name at the end of the statement in parentheses.

1.  People may have their data published to a seed file and spread across the internet for anyone to download.

2.  “Viruses and other forms of malware are the most basic of threats.  The files you download are foreign and you should treat them as such; scan them promptly after downloading them.  Most major anti-virus programs have the ability to add folders for auto-scanning, which is probably the ideal solution if you either don’t have time or don’t want to waste effort doing things manually.” (Yatri Trivedi) <https://www.howtogeek.com/howto/33178/beginners-guide-to-bittorrent-protecting-your-privacy/>

Using the details above, **explain** to the average reader how the **data storage concern, data privacy concern, or data security concern is related to the computing innovation** in approximately 100–200 words. Write your response in the space below.

The protocol is safe to use if the user is careful about the sources of the files and if they use common computing safety practices, but the existence of malware should worry users enough to not trust files they download if the source is unknown. The legality of the protocol has been protected in court so there is worry about downloading non-copyrighted files. The protocol could been seen as a benefit to user’s privacy because they receive their data from a distributed network rather than a central network. A central network is much easier to target, and is more prone to hacks. The infamous network leaks of major companies, which hold many internet users data, is obvious evidence to be wary of giving data to centralized powers on the internet.