**Activity 1** of 2: **(50 marks = 4 × 12.5)**

Identity, credentials, and authentication have become a serious issue now that you can’t do much of anything in life without a user ID and ~~password~~ *passphrase*. Your digital identity is becoming part of your real world self. (Have you watched Black Mirror?)

🡺 Your name: **Jason Jun** Student No.: **126683200** UserID: **jjun10@mySeneca.ca**

Passphrase Manager

🡺 Advantages

- Generates strong, secure passphrase

- Only stores encrypted versions of your passphrase

- Does not know your primary password, so hackers would not be able to hack into your password

- Can have unique, strong passwords on different account, instead of using one same password for the accounts.

- If you forget a password to an account, the passphrase manager will auto-fill the password for you.

- The manager can be logged in through different devices.

🡺 Disadvantages

- Since the passphrase manager stores all the data in one place, it is vulnerable to hackers. Hackers need to unlock the manager and will have access to other accounts.

- It might take a long time to log all your credentials in a password manager.

- If you forget the manager’s password or other important information, you may lose access to the other passwords inside the manager.

- Does not work with all the websites.

Passphrase Generator

🡺 Advantages

- It is easy to learn and use

- It generates a very secure passphrase, that is hard to hack into

- It is free

- There is no need to memorize the passphrase

🡺 Disadvantages

- Sometimes, it is hard to remember your passphrase

- Some websites put limit on number of characters, so it is hard to generate a secure passphrase for the websites.

Use single sign on where possible

🡺 Advantages

- Easy to access to the accounts

- The users do not have to memorize multiple passphrases

- Reduce risks of getting hacked

- Fast to log in the accounts

🡺 Disadvantages

- The passphrase’s length may be forced to be long

- When the single sign on is down, all the connected site to it will be stopped and need to manually enter the passphrase in

- May be risky when more than one person is using a same technology.

- Some single sign on may share their users’ information to the other sites.

What method(s) do you use to safeguard passwords and your digital life?

🡺 To safeguard my passphrases and the digital life, I save them in a separate word file and save the main on my personal computer. To back up the file, I update the file and back up to my external hard drive.

Why is that (or why will that be) the best method for you?

🡺 This is the best method for me because by having my passphrases all written in a word file and backed up, I would not need to worry about losing all my passphrases when my personal computer goes down for an unknown reason.

Why won't you use other methods?

🡺 I would not use the other methods such as storing the file on cloud or using the passphrase managers because since the technologies have developed so much, it is easier for hackers to go into my data. Also, I strongly am not in favour of using the passphrase managers because if my phone and my other computer get stolen or get lost, my information would be exposed to those who has my technologies. Therefore, I am in favour of storing my data containing my passwords on a separate file backed up on my external hard drive.

**Activity 2** of 2: (50 marks) **"If you're not paying for the product, you *are* the product."**   
**🡺 What is the price of free?**Discuss and [*argue*](http://theconversation.com/no-youre-not-entitled-to-your-opinion-9978) your point of view in 250+ words. Before writing, see below; there is much food for thought.

🡺 Many services given by companies, such as Google, Facebook, Instagram, and more, are free to the users. However, why would the services given to users be free if the companies do not benefit from it? The reason behind free services given for free is not that difficult to understand. The companies with the free services let the users to utilize their features, they collect data from the users. The data collected from the users contain the what the users have went through and their interest. Then with the data, the companies would get advertisements from the other companies that the users maybe interested and clicking the link to the product. Hence, whenever a user is using the service for a long time, there are advertisements popping up that the user was looking into in the past. On the other hand, there are websites that ask the users for a fee or money to keep their privacy hidden. In the quote, “If you’re not paying for the product, you are the product.”, it means that the users are the products to the companies. When companies see the users using the free services, companies get money from other companies to advertise within the services. By doing so, the users would click the advertisement and decide to buy a product or not. If a product is not enforced to the users, it could mean that there is some part of the users that the company is willing to take secretly and use for their benefit. The price of free services would mean that the privacy of the users will be taken instead. Users would need to pay a price of having the companies to look into the users’ interests, behaviours, and other necessary data. There are many denials to the agreement of the companies to take their private information and use for their good. However, in order to use a product or a services, the users need to trade for another products or services, so that it is equal on both sides. Therefore, the price of free would be sacrificing and allowing the companies to take something from you.