Read the following articles:

· <http://www.cbc.ca/news/technology/ransomware-europe-russia-ukraine-petya-bitcoin-1.4179683>

· <http://www.cbc.ca/news/canada/toronto/oshawa-hospital-cyberattack-1.4114758>

· <https://www.thestar.com/news/canada/2017/05/13/ontario-health-ministry-on-high-alert-amid-global-cyberattack.html>

Guidelines for writing a supported opinion paragraph (SOP)

· <http://schools.peelschools.org/sec/fletchersmeadow/studentlife/OSSLTprep/Documents/Sample_%20Writing%20a%20Supported%20opinion%20paragraph.pdf>

**Level 1: Ransomware Basics**

1. What is a ransomware attack?

A ransomware attack is where people take hold of data in your computer, and request a certain amount of money to unlock your data so it can be used again.

2. How does ransomware work and what does it affect?

Ransomware uses a key that encrypts your data, and will require a key so that the data can be unencrypted. It impacts the person that got their data encrypted by the ransomware people. This can be a pain because you do not have the key to retrieve your data. Ransomware is usually received through emails or applications and programs that you may have downloaded. Theses applications or programs target administrator permissions, and then uses those administrator permissions so that they can inflict harm on your data.

**Level 2: Canada & Other Countries**

1. What was affected in Canada in the articles above?

A hospital was affected, and the hospital had to take care of a cyber attack that hit a lot of countries other than canada. The records weren’t leaked, so the information was safe. There was a cyberattack that hit lakebridge in Oshawa, and i affected canadian health ministries.

2. How badly was Canada affected?

Canada was greatly affected due to frozen computers. This would render the computers useless until the attack was over. The networks were affected as well by the ransomware that wasn’t noticed by the workers. IT experts worked to fix the problem in the hospital department. The cyber attack took control of many computers and demanded a payment of $300 to retrieve them.

3. What other countries were affected?

USA, Russia, europe, and ukraine. For the us, drugstores and food stores were affected as well as other shops. Ukraine was affected in parts of government, and other areas like gas stations, banks, etc… A major company in ukraine that was hit was Ukrtelecom.

**Level 3: Attack Details**

1. Where did the attack come from?

Malicious programs that were called WannaCry. They used SMB protocol to intercept network nodes. Microsoft implementation can be tricked from the arbitrary code that they used. This managed to infect a lot of computers.

2. Why was the attack started?

The attackers wanted a lot of money and wealth, just like they would from anyone else. They could attack the hospitals to steal information, and they also knew that the government files were more important than day to day computers.

3. How was the attacked stopped?

The attack was stopped by companies updating systems to counteract the malware that the attackers used. Some computers failed to update, and were reset by the ransomware.

4. How could you be affected by a ransomware attack?

I could carefully check through emails, and be careful of what I am downloading. When I download something, I make sure that it is safe before I continue. Sometimes, other programs can download other programs in the installer when you click accept, and so it’s good practice to read through what the installer is performing before you agree to their terms.

5. How can you protect yourself against a ransomware attack?

You can install an antivirus that will check through your computer on a regular basis to ensure that your data is safe from threats. You can also speculate and look at emails very closely, especially those who look suspicious or come from random senders that you wouldn’t usually see emails from. Links can be contained in the email, and you should make sure that the email is safe before continuing on that link.