Case 01

Ransomware Analysis

1. **What is a ransomware attack?**

Ransomware is malicious software that targets the victim's data and encrypts it or lock up the computer. Making the victim's data and device not accessible until a ransom is paid.

1. **How does ransomware work and what does it affect?**

ransomware can spread and get on the victim's computers through email, downloaded files, or a trojan horse attack. Some ransomware uses scares tactics such as pretending to be the police to get victims to pay up. It affects all computers

on a network and it spreads when an infected network directly connects to an uninfected network. Since most computers

are connected to some sort of network, it is very easy for an attack to become widespread.

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

A hospital in Oshawa was one of the victims of the WannaCry ransomware attack. Although the hospital's security systems were able contain the attack and damage was sustainable. The attack affects 150 countries in the span of a few days, this proves how effective this type of attack is because of how connected everything is and this makes us very vulnerable to attacks.

1. **How badly was Canada affected?**

Canada was not affected by the WannaCry attack because the attack didn't spread from the UK to Canada. All it took was one person to click on an infected link and the attack would've spread to Canada.

1. **What other were affected?**

The main countries that were affected were Ukraine, Russia, Germany, Italy, and the US.

1. **Where did the attack come from?**

The attack's origin is unknown, but researchers uncovered leaked NSA code within code.

1. **Why was the attacked started?**

The attack was started to cause as much damage and to spread to as much computers around the world. By spreading very quickly, it takes victims by surprise. And it's obvious it is to scam clueless people who don't know much about computers of their money.

1. **How was the attacked stopped?**

A kill switch for the program was found after Microsoft released emergency security patches. This prevented the WannaCry attack from spreading even further

1. **How could you be affected by a ransomware attack?**

I could be affected through email or social media messaging. For example, the ransomware could be in an email that I receive, and it might be disguised as a normal looking email. Another instance that I could be affected by an attack if a person sends an infected link through social media.

1. **How can you protect yourself against a ransomware attack?**

I can protect myself from ransomware attack by being mindful of what links I click. And being wary of what security issues are in the news.