### **Unit 6 Critical Thinking Questions**

## 1. Imagine you were setting up a wireless router for a banking company. Compare the benefits and risks of hiding your SSID and explain why you would keep your SSID public or private.

In reality, hiding your SSID really isn't going to do anything. You cannot disguise the router's activity, so it can still be attacked by hackers. With your network invisible to wireless devices, connecting becomes a bit more complicated.

# 2. When you think about how you or others use smartphones, what kinds of personal information are either stored on or input into them? How should that affect your decisions about allowing "app permissions?"

Almost all of a person's personal information can be stored on a phone. This includes passwords, credit card information, the person's address, where you work, where you go every day, and more. When you decide on whether to accept app permissions or not, be **100%** sure you know what information you are allowing the app to see. Some apps could be bad and steal information off your phone and sell it to hackers. If you question app permissions, you might not want to accept them.

#### 3. Which of the three major mobile OSes is least secure, and why?

I believe that Android is the least secure. The reason is because Android allows you to install any package you want (an APK file). These files can be modified to look like the real thing but can contain viruses and really anything someone wants to put in it. Apple does not let you do this on iOS.

4. Which OS would you expect to be run on most servers, and why? Which OS is on most laptop and desktop computers in the U.S., and why do you think that is? In places where there are more cell phones than traditional computers, like places in the world that jumped from landline computing to mobile (cell phone) internet access without having cable/DSL line internet, which OSes are likely to be more common?

I expect Linux to be running on the most servers, as it has lots of features that servers can benefit from as compared to any other OS. Windows is on the most laptops and desktops in the U.S. as most computers come with it, as compared to macOS which is only on computers that are made by Apple. For mobile devices, Android is the most used. The reason is the same as for Windows, it is on so many devices. iOS is only on Apple phones, and Windows mobile was only on phones made by Microsoft.

## 5. What are the characteristics of a strong password? What should be avoided when coming up with passwords? Describe the possible negative consequences of an easy-to-guess password.

- At least 8 characters—the more characters, the better.
  - A mixture of both uppercase and lowercase letters.
    - A mixture of letters and numbers.
- Inclusion of at least one special character, e.g., ! @ # ? ]

The most important thing to do is not to reuse passwords. If someone were to get into one of your accounts, one of the first thing they'll do if they try to get into another one of your accounts is try the same password that they just used. For easy to guess passwords, that makes it easier for people to guess your password, hence the name of the term. Don't use them, as it will increase the chance of

your account being cracked by a hacker. Use a strong password, as that will make the intruder have more trouble with getting into your account.