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# ISEC 375 Homework 10

Answer the following questions based on your reading of the textbook, the module key points, and the instructor’s presentation this week.

1. **[9 points]** What are the challenges of mobile phone investigations? What are the advantages of mobile phone forensics in finalizing a case?

The challenges that come with mobile phone investigations are how the phones are advancing so often and they tend to not be compatible with older models so you need to know what the differences between the phones are and get a warrant for the phone. There is also the trouble of how there is not a specific standard for where messages on the phone are stored you also have the different applications within the phone that could store messages so you may need another warrant to gather information from these apps. Advantages for mobile phone forensics are that people are not as likely to put in a lot of security measures for their phones and the phone can contain a lot of information that can useful for the investigation.

1. **[9 points]** You arrive at a crime scene. You notice a Samsung Galaxy smartphone on the desk connected to a laptop computer by a data cable. Provide at least five hardware components/systems from which you can collect digital evidence?

Five hardware components we can collect digital evidence are the SIM card where information can be stored, the RAM which stores memory, ROM which stores data that can not be altered, the microprocessor which has the temporary memory storage, and the hardware interfaces which includes the data cable.

1. **[12 points]** What actions do you take for the crime scene described above?

First we should get a photo of the scene so we can document how we found it set up and then we disconnect the phone from the laptop and check the power for the devices to make sure they wont die before we can gather information. We disconnect them to make sure that there is not a data overwrite or wipe. We check to see if the phone is locked with a passcode and if so we place the device in a faraday bag or paint can so it can not be reached with remote wiping. If it is unlocked then we will switch the device to airplane mode and disable screenlock and remove the passcode so we do not get locked out later on. Now we need to see if the warrant covers seizure of the laptop as well as the phone or if it only covered the phone as we may not have expected the laptop. We can seize the laptop as it was connected to the phone under the chance of evidence tampering so we will take note of any running programs and close them. Then we can go to the settings and set the power and sleep setting to do nothing when the screen closes and turn off the wait time until sleep. Now we can take the laptop.