Student Name:

Student ID:

2019 Introduction to Computer Science – Assignment 3

Due Date: October 4, 2019

Questions

1. You have subscribed the Chung Hua Telecom service in Taiwan. Your cell phone has the following setting.
   * Wi-Fi Off
   * Bluetooth Off
   * Cellullar On
   * Hotspot Off

Now, you in HK and you would like to talk to your friend, who is also in HK, by using LINE. Describe in detail how you can make the LINE call.

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1. From Question 1 and Question 2, identify which method is free of charge and which one is expensive.
2. In the 1980s, the CPU in Apple’s Macintosh was different from the CPU in Windows-based computers. State which CPU is running in Macintosh and which CPU is running in Windows-based computers.
3. Apple A-series processor is designed as a system-on-chip processor. What is a system-on-chip processor?
4. If an app is designed for iPhone, is it possible to download and install it in an HTC phone? Why?
5. Is it possible to install Sefari (a browser developed by Apple) in a computer running Windows operating system? Why?
6. Once a computer has just turned on, CPU will have to execute its first instruction. Which hardware device in a computer has stored this instruction?
7. While you have turned on your cell phone for almost two months, you will find that almost all LINE (or WhatsApp) incoming message notifications are missing. Why?
8. You have just turned on your computer at home and would like to search for information by accessing ‘google.com’. You open a browser, either Sefari, Chrome or Edge, and find that the page cannot be open. State four possible reasons why it happens. Note that your Internet service provider is Chung Hua Telecom.
9. State four family series of computer operating systems.
10. State three family series of cell phone operating systems.
11. State any ten applications of computer that you can easily find in your daily life.
12. What are the six basic logic gates that can be found in a digital system?
13. If only NAND gates are available for use, is it possible to build a digital system? Why?
14. If only AND gates and NOT gates are available for use, is it possible to build a digital system? Why?