Student\_\_\_\_\_

## **Case Studies in Computer Science**

Date: \_\_\_\_\_

**Directions:** Create a 3-5 minute presentation that answers each of the following questions. Be sure to address the command term used in each question. The format of this assignment is up to you, options include:

- a) a PowerPoint presentation (or nearpod or other similar presentation that can be downloaded and then posted to the class web site on hwmath.net/IBCS
- b) a video which can be downloaed and then posted on hwmath.net/IBCS
- c) a poster which will posted in the classroom, as well as photographed and posted on hwmath.net/IBCS.

Part 1: Terminology

- 1. Define the term Radio-frequency identification (RFID)
- 2. Define the term Internet of Heath Things (IoHT)
- 3. List five examples of IoHT devices
- 4. Define Near Field Communications
- 5. List five medical devices that use Near Field Communications
- 6. Define Robotic controlled surgery

Part 2: Applications

- 7. Describe how RFID is used in highway toll both applications
- 8. Using one example, explain how RFID can improve patient safety
- 9. Using one example, explain how RFID can be used in medical diagnosis
- 10. List some of the standards and protocols supporting Robotic controlled surgery
- 11. Explain how one standard or protocol supports robotic controlled surgery