Chapter 1 – Computer Systems

Chapter Objectives

- I can describe the relationship between hardware and software.
- I can define various types of software and how they are used.
- I can identify basic computer hardware and explain what it does.
- I can explain how the hardware components execute programs and manage data.
- I can describe how computers are connected together into networks to share information.
- I can explain the importance of the Internet and the World Wide Web.
- I have an introductory understanding of the Java Programming Language.
- I can describe the steps involved in program compilation and execution.
- I have an introductory understanding of graphics and their representations.

Chapter Overview: This introduction to basic computer systems and components is a key beginning to any computer science course. These topics will give you the background needed in order to relate to the computers that they are programming and to understand the ethical and legal issues the accompany computer usage.

Appendix E talks about base conversion from decimal to binary and binary to decimal.

Multiple Choice: 1.1 - 1.8

True False: 1.1 – 1.10

Short Answer: 1.1 - 1.10

Worksheets: Project 1.2 Worksheet (on back)

Programming Projects: 1.1 - 1.3

^{*}Create one folder named "Chapter 1 Projects - Last Name"

^{*}Within this folder you should have one folder for each of the three projects. (1.1 - 1.3)

^{*}Submit all three projects to the Share Drive within this one folder.

^{*}Use the back of this sheet to answer Project 1.2 - Tell me whether each question is no error, a compile-time error, a run-time error, or a logical error.

1.2 Programming Projects Template

| | My Prediction | Error Message | Type of error ("compile- time", "run-time", "logical", "none", "none, but unconventional") |
|----------|---------------|---------------|--|
| <u>a</u> | | | |
| Ы | | | |
| <u>c</u> | | | |
| <u>d</u> | | | |
| <u>e</u> | | | |
| <u>f</u> | | | |
| 9 | | | |
| <u>h</u> | | | |