

Chapter 1 - 1.1 Section Review

Name: Chester Austin Date: January 29, 2019 Description: Written assignment for Chapter 1 - 1.1 Section Review Directions:

1.1.3 Section Review
Do 5 of the review exercises.
This is a minimum number, you can do more.

Question 1

Q: How do **assemblers** and **linkers** work together?

A: An **assembler** converts assembly code that would have been linked previously by a **linker** utility program.

Question 2

Q: How will studying assembly language enhance your understanding of operating systems?

A: Assembly languages will enable understanding of how application programs communicate with the operating system via interrupt handlers, system calls, and common memory areas.

Question 3

Q: What is meant by a **one-to-many relationship** when comparing a high-level language to machine language?

A: A **one-to-many relationship**, in reference to a high-level language, means that a single statement can have multiple assembly language or machine language instructions.

Question 4

Q: Explain the concept of **portability** as it applies to programming languages.

A: A **portable** language means that code written should compile and run on any computer, unless specific references to library functions does not exist under a single operating system.

Question 5

Q: Is the assembly language for **x86** processors the same as those for computer systems such as the **Vax** or **Motorola 68x00**?

A: No, assembly languages written for **x86** processors would be different than other computer systems such as **Vax** or **Motorola 68x00** unless it is translated during execution by a program inside the processor known as a **microcode interpreter**.