1. How do assemblers and linkers work together?
   1. Assembler converts source code programs from assembly languages into machine language. Linker combines individual files created by an assembler into a single program.
2. How will studying assembly language enhance your understanding of operating systems?
   1. Assembly is a good tool for learning how application programs communicate with the computer’s OS via interrupt handlers, system calls, and common memory areas. Assembly programming also helps when learning how OS’s load and execute application programs.
3. What is meant by a one-to-many relationship when comparing a high-level language to machine language?
   1. A single statement expands into multiple assembly language or machine instructions.
4. Explain the concept of portability as it applies to programming languages.
   1. A language whose source programs can be compiled and run on a wide variety of computer systems is said to be portable.
5. Is the assembly language for x86 processors the same as those for computer systems such as the Vax or Motorola 68x00?
   1. No, each assembly language is based on either a processor family or specific computer.