

Chapter 1 Homework

Multiple Choice

- | | |
|------|-------|
| 1. B | 8. D |
| 2. D | 9. A |
| 3. A | 10. B |
| 4. C | 11. A |
| 5. B | 12. C |
| 6. B | 13. B |
| 7. C | 14. D |

Find the Error

1. Display "What is the room's width?"
Input width.
Display "What is the room's length?"
Input length.
Display width * length.

Algorithm Workbench

2. print "Enter price: "
Input price
print "Enter tax rate (percentage): "
Input tax_rate
tax = tax_rate / 100 * price
print "Tax: " + (tax rounded to the penny)
print "Total: " + (price + tax, rounded to the penny)

Short Answer

1. Memory is volatile and very fast, while secondary storage can store data in the absence of power, and is generally available in much larger quantities due to its lower price.
2. RAM is usually volatile.
3. System software is the software that interacts with the hardware to provide an interactive environment, including operating systems and drivers. Application software uses this system as a platform and allows the user to perform tasks.
4. Operating Systems:
 - a. Multi-user, multi-tasking
 - b. Single-user, multi-tasking
 - c. Single-user
5. The CPU reads instructions in machine code; the programming language is simply a user-friendly way to write these instructions.
6. A high-level language adds a thick layer of abstraction, including many instructions and APIs that would have to be negotiated manually in machine language.