

Study Questions (Chapter 01 -- Part 2)

1. Can a clever system programmer differentiate between the encoded data object and encoded program instruction from their binary bit patterns?
2. Define and differentiate between constants, variables, and pointers.
3. In *register transfer language (RTL)* notation, what does $[X] \leftarrow [Y] + Z$ mean?
4. In *register transfer language (RTL)* notation, what does $[X] \leftarrow Y + Z$ mean?
5. In *register transfer language (RTL)* notation, what does $[X] = Y + Z$ mean?
6. Which is faster, cache memory or registers?
7. Which is faster, cache memory or dynamic memory?
8. Computer buses link together two or more functional parts of a computer and allow the exchange of data. How do these computer parts communicate to each other without having data collision?
9. Can a computer system have more than one bus?
10. Define bus width.
11. Define bus bandwidth.
12. Define bus latency.