

1. What is a “computer system”?
2. What are some of the parts of a computer system?
  - A. Digital Logic
  - B. Control
  - C. Machine
  - D. Systems software
  - E. Assembly Language
  - F. High Level language
  - G. User

3. What is the difference between a compiled language and an interpreted language?
4. Is “C” a compiled language?
5. Who invented the “C” language?

The C programming language was invented by the late Dennis Ritchie between 1972 and 1973 while working at Bell Labs.

6. How long has “C” been in use?

C has been in use for about 50 years.
7. Is a compiler a translator?
8. Is an assembler a translator?
9. What is the command to list out the contents of a directory on a mac terminal window?
10. What does the “C” function **atof()** do?
11. What are the bottom two layers of a computer system? Give a brief description of each.
12. What are the three “steps” of the Von Neumann Architecture?

- A. The control unit fetches the next instruction to execute from memory
- B. The instruction is decoded into machine language (1s and 0s) so that the processor’s microcode can understand what the system is being instructed to do.

C. The Arithmetic Logic Unit carries out the decoded instruction and produces a result which may end up in memory or another register.

13. What is the purpose of an ALU?
14. What is a “register”?
15. What is one difference between “Application software” and “System software”?
16. Is the phrase **cmp rdi, rsi** machine language?
17. How many buses are included in the system bus?
18. What is the decimal value of 100101112?
19. What is the decimal value of 111111112?
20. What is the largest unsigned integer value that will fit into 16 bits?