1. A computer combined with external software/hardware which all work together to function as a single unit
2. Some parts of a computer system are CPU, memory, input/output devices, and storage devices
3. An interpreted language can take the source code and use a virtual machine to convert it straight to machine code while compiled languages requires the user to perform more steps (i.e. compiling and assembling)
4. C is a compiled language
5. Dennis Ritchie invented the C language
6. C was being created between the years 1969-1973 but 1972 was when most consider it to be widely used

Source: <https://www.bell-labs.com/usr/dmr/www/chist.html#:~:text=C%20came%20into%20being%20in,creative%20period%20occurred%20during%201972>.

1. Yes, a translator is anything that converts one coding language to another
2. Yes, a translator is anything that converts one coding language to another
3. “LS” is the command to list out the contents of a directory when in a mac terminal
4. atof() converts a string to a float point number representation

Source:

<https://en.wikibooks.org/wiki/C_Programming/stdlib.h/atof#:~:text=atof%20is%20a%20function%20in,standard%20library%20header%20file%20stdlib>

1. The bottom two levels of a computer system are hardware and software. Hardware is the physical elements of a computer and can be both internal and external. Software is a set of instructions utilizing data or programs to proforma task

Source:

<https://www.techtarget.com/searchapparchitecture/definition/software#:~:text=Software%20is%20a%20set%20of,that%20run%20on%20a%20device>.

1. The three steps of Von Neumann Architecture are Fetch, Decode, and Execute
2. The ALU in a CPU performs basic arithmetic functions such as addition, subtraction, division, and multiplication as well as logic operators
3. The register in a CPU stores data and instructions in temporary storage for quick access
4. Application software is designed to perform specific tasks or functions for end-users while system software is responsible for managing and controlling the computer hardware and providing a platform for running application software

Source: <https://chat.openai.com/>

1. The phrase “cmp rdi, rsi” is assembly code and not machine language
2. There are three busses in the System Bus: the Data Bus, the Address Bus, and the Control Bus
3. The decimal value of 100101112 is 15110
4. The decimal value of 111111112 is 25510
5. The largest unsigned integer value that will fit into 16 bits is 65535

Source:

<https://users.ece.utexas.edu/~valvano/embed/chap3/chap3.htm#:~:text=There%20are%2065%2C536%20different%20unsigned,and%20the%20largest%20is%2065535>.