

Chapter 02 Worksheet

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1. Give an example of a binary number. (While a number such as ``1" can be a binary, decimal, and hexadecimal number, try coming up with an example that better illustrates the differences between the different bases of numbers.)
2. Give an example of a decimal number.
3. Give an example of a hexadecimal number.
4. Convert the numbers 1, 10, 100, 1000, and 10000 from binary to decimal.
5. What is a compiler?
6. What is source code?
7. What is machine language? (Don't just say binary. That's not correct.)
8. What is a first generation language? (Don't just say binary. That's not correct.)
9. What is a second generation language?
10. What is a third generation language? (Explain, don't just give one example.)
11. What is an interpreter and how does it differ from a compiler?
12. Search the web and find some of the most popular programming languages. List the website(s) you got the information from and what the languages are.
13. Look at the job boards and see what languages people are looking for. List the languages and the job board you looked at.
14. What is the difference between the ``syntax" and ``semantics" of a language?

15. Pick a piece of technology, other than a computer you use regularly. Briefly describe the hardware and software that run on it.

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