

Study Questions (Chapter 02 – Part 1)

1. What is the minimum number of bits that are needed to represent 3 K different values?
2. What is the minimum number of bits that are needed to represent 3 Mega different values?
3. What is the minimum number of bits that are needed to represent 5 Giga different values?
4. Pick a decimal number.
Convert this number to binary.
Convert back the generated binary number to a decimal number.
You need to get the same value that you started with.
5. Pick a decimal number.
Convert this number to hexadecimal.
Convert back the generated hexadecimal number to a decimal number.
You need to get the same value that you started with.
6. Pick a decimal number.
Convert this number to octal.
Convert back the generated octal number to a decimal number.
You need to get the same value that you started with.
7. Pick a hexadecimal number.
Convert this number to octal.
Convert back the generated octal number to a hexadecimal number.
You need to get the same value that you started with.
8. Pick an octal number.
Convert this number to hexadecimal.
Convert back the generated hexadecimal number to an octal number.
You need to get the same value that you started with.