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CSI 130 -01CA

08/27/2014

Pg2-28:1,2,4,ei,5hj,6eh,7gi,8ah,9bd

1.) After doing some research in regards as to why we use the binary system with modern systems, I was able to come to this conclusion. We use binary because, of technological limitations. As of now we do not have the technology to reliably and efficiently have systems that have multiple states in a switch. However, while reading I did see quite a bit about quantum computing and how it will change the current “on-off” design. But, for now we are limited to using Binary.

2.) Hexadecimal for the most part is used for the same reasons we have HLLs – simplicity. Hex obviously isn’t as intuitive as say – a Python script. But, with a little practice it’s still more readable than pure binary code. For example, we know B in hexadecimal is equivalent to 11 in decimal. Thus, 0xB = 11. Whereas 11 in binary is 1011.

4.)

e.) 25

i.) 3.625

5.)

h.) 1010000

j.) 1111011

6.)

e.) 22

h.) 55994

7.)

g.) 60

i.) 7DE

8.)

a.) 1010

h.)

9.)

b.) 657

d.) 1340