02/05/2015

Moore’s Law: the number of transistors in an integrated circuit/IC/chip doubles every two years

1970: 1K transistors per chip

1972: 2K

1974: 4K

1976: 8K

1978: 16K

1980: 32K

1990: 1024K = 1M

2010: 1024M = 1G

2012: 2G

2014: 4G

- Predicts the rate of invention

02/06/2015

Operating system: manages the physical resources of the computer

Simultaneity in operating systems is an illusion; the processor actually cycles constantly at about 3 billion instructions per second

02/12/2015

Whitespace: the space character “ “, the newline “\n”, and the tab “ ” (\t)

Escape character: overrides browser functionality, in HTML: &\_\_\_;

02/13/2015

SFTP IP Addresses: 149.89.(160/161).(101-104)

02/26/2015

number + comparison operator + number → boolean value

boolean + logical operator + boolean → boolean

03/10/2015

String literal: enclose with single (‘), double (“), or triple (‘’’) quotes, depending on quote nesting level

String comparison operations are based on ASCII code of the first character of each

String indexing begins from 0 and ends at len(str)-1

03/12/2015

* Slicing: s[start:end] returns the substring of p starting from start (inclusive) and ending at end (exclusive)
* s[0:2] = substring of s starting from position 0 up to but not including 2
* Specifying a position beyond the end of the string does not cause an error, but returns the substring up until the end of the string (empty string if the starting position is also beyond)
* Leaving out either starting or ending will substitute for starting or ending position, respectively.
* Optional third parameter indicates the step size.
* Strings are immutable!

03/26/2015

String split() and join() methods turn strings into lists or lists into strings, respectively.