



Terminology and Types of Software

Basics of Computing

Terminology

- ✴ Syntax

- ✴ How a command or operator is used

- ✴ Software

- ✴ The instructions that tell a computer what to do

- ✴ Hardware

- ✴ The physical components of a computer

Terminology

★ ASCII

- ★ American Standard Code for Information Interchange
- ★ Commonly used data format for storing/exchanging information between computers and programs

★ Bit

- ★ Smallest piece of information used by the computer. Either a 1 or 0

Terminology

☀ Bug

- ☀ A programming error that causes a computer program to behave in an unexpected way.

☀ Byte

- ☀ A piece of computer information made up of 8 bits

Terminology

- ★ Kilobyte

- 1024 bytes

- KB

- ★ Meg/megabyte

- 1024 kilobytes

- MB

Terminology

- ★ Gig/gigabyte

- 1024 megabytes

- GB

- ★ Terabyte

- 1024 gigabytes

- TB

Terminology

☀ Memory

- Temporary holding area where data is stored

☀ Return Value

- The number, string, data that a function “sends” back

Terminology

★ API

- Application Program Interface
- A set of routines, protocols, and tools for building software applications.
- Operating Systems provide
- Other programs provide

Terminology

★ Library

- a collection of precompiled routines that a program can use.

★ Compile

- To transform a program written in a high-level programming language from source code into object code.

Terminology

★ 4GL

- ★ 4th Generation Language
- ★ programming languages closer to human languages than typical high-level programming languages. Most 4GLs are used to access databases.
- ★ 1st: machine language
- ★ 2nd: assembly language
- ★ 3rd: high-level programming languages, C, C++, and Java.
- ★ 5th: artificial intelligence and neural networks.

Terminology

☀ Portability

- Ability of a language or program to be used on more than one type of computer

☀ Benchmark

- test used to compare performance of hardware and/or software.

Terminology

★ Alpha/Beta

- ★ 1st and 2nd Versions

- ★ Alpha Testing

- ★ Beta Testing

- ★ Last testing before commercial release
- ★ Usually non-programmer
- ★ Usually outside of the company



Information Processing Model

- ☀ Input

- ☀ Examples of input?

- ☀ Processing

- ☀ Making a change to information

- ☀ Output

- ☀ Examples of output?

- ☀ Storage

- ☀ What happens if you turn off the computer?

“Assignment”

☀ <http://www.webopedia.com>

- ☀ Find 10 words that you didn't previously know
- ☀ Create a Word or .txt file in your Z drive
- ☀ Be prepared to talk about one word that you found.