Intro & History

* One language that was designed primarily for mathematical and scientific programming was **FORTRAN**.
* One example of an imperative programming language is **Fortran**.
* One language that was designed primarily for business data processing was **COBOL**.
* PL/I, which attempted to be an all-encompassing language, borrowed ideas from several languages. PL/I had **good control constructs like ALGOL, good mathematical operators like FORTRAN, and good data processing features like COBOL**.
* One language that was designed primarily for teaching novice programmers was **BASIC**.
* Simula had a strong influence on the concepts embodied in the **Object-Oriented Languages**.
* One language that was designed primarily for teaching novice programmers was **Pascal**.
* Several people find that they can develop programs quickly in Perl, but they have trouble maintaining other people's Perl code. That is, **Perl has good writability but poor readability.**
* One of the earliest object-oriented languages was **Smalltalk**.
* One example of a logic programming language is **Prolog**.
* Two examples of scripting languages are **Python and Lua**.
* One language that was designed primarily for use in artificial intelligence was **LISP**.
* One scripting language that was designed for use in Web applications was **PHP**.
* High level languages were an important advance over assembly languages because **high-level languages are portable from one machine to another**.
* One pure object-oriented scripting language is **Ruby**.
* Array bounds-checking was deliberately omitted from the C programming language. This gives C greater **efficiency**.
* Two languages that were strongly influenced by ALGOL are **C and Ada**.
* One language that was designed primarily for implementing an operating system was **C**.
* Exception-handling was deliberately included in the Ada programming language. This gives Ada greater **reliability**.
* One language that was designed at the request of the U.S. Defense Department was **Ada**.
* One example of a functional programming language is **Scheme**.
* A language that was developed by adding object-oriented features to the language C was **C++**.
* Array bounds-checking was deliberately included in the Java programming language. This gives Java greater **reliability**.