



COMPUTER PROGRAMMING

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INTRODUCTION TO COMPUTER PROGRAMMING

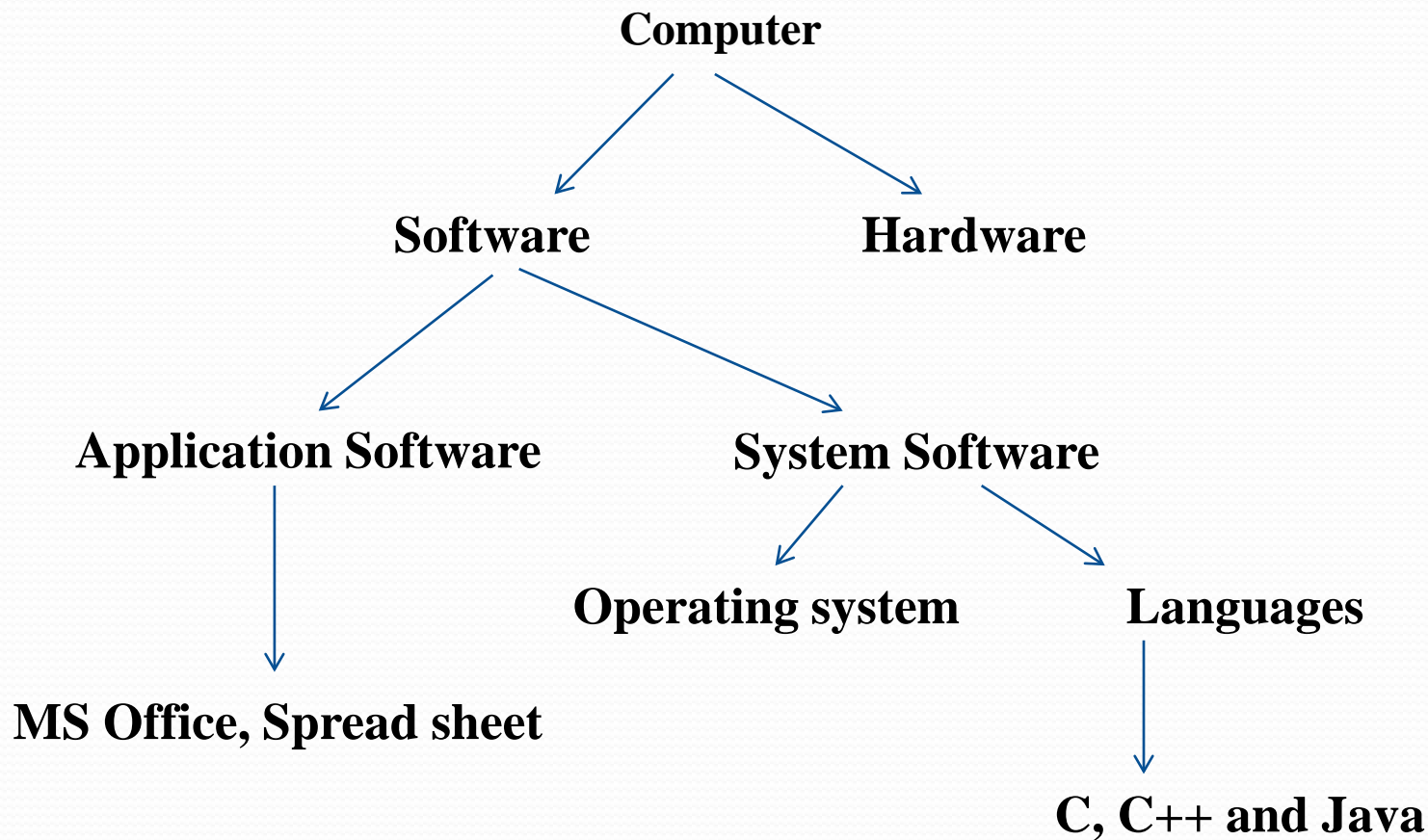
- 1) Introduction to Computer Programming.
- 2) Computer, Hierarchy of Computer, Compiler.
- 3) Interpreter, High level language, Features of C language.

- Program
- Software
- Compiler
- Interpreter
- Modular programming/Structured Programming
- Non structured programming
- Need of Programming language
- Difference between structured and object oriented programming
- Advantages of object oriented programming

Computer

- In basic term, a computer is an electronic device that processes data, converting it into information that is useful to people.

Hierarchy of Computer



Program

It is the set of instructions to be given to computer for processing and desired results.

Software

Set of program(s).

Compiler

A **compiler** is a special program that processes statements written in a particular programming language and turns them into machine language or "code" that a computer's processor uses.

Interpreter

An **interpreter** translates high-level instructions into an intermediate form, which it then executes.

Computer language processor that translates a program line-by-line (statement-by-statement) and carries out the specified actions.

High level language

- A programming **language** such as **C**, **FORTRAN**, or **Pascal** that enables a programmer to write programs that are more or less independent of a particular type of computer.
- Such **languages** are considered **high-level** because they are closer to human **languages** and further from machine **languages**.

Features of C language

Why Learn C

- Compact, fast and powerful.
- “Mid-level” language.
- Standard for program development(Wide Acceptance).
- It is everywhere (Portable).
- Supports modular programming style.
- Useful for all applications.
- C is native language of Unix.
- Easy to interface with System devices/assemble routines.
- C is terse.

Recommended Books

- [1] Kernighan, Brian and Dennis Ritchie.
The C Programming language 2nd ed.
Upper Saddle River, NJ: Prentice Hall, 1988.