

- **General Definitions**
 - *System, Computer System, Program, Hardware, Software, ...ect*
- **Hardware Components**
 - *CPU, Main Memory, I/O, System Bus*
 - *CPU Structure (ALU, Registers, Control Unit, CPU Interconnection)*
 - *Basic Computer Functions (Data Processing, Storage, Movement, Control)*
- **Memory System Input/ output**
 - *Input Devices (Text I/P Devices, Graphics I/P Devices, Other Types)*
 - *Output Devices (Display Screens, Printers, Speakers)*
 - *Mass Storage or External Storage*
- **Representation of Information on Computer**
 - *Numeric Data*
 - *Number System (Decimal, Binary, Octal, Hexadecimal)*
 - *Conversion from Base r to base t where r and t Belongs to any Number System and $r < t$*
 - *Integer Representation (Positive and Negative Integers)*
 - *Addition and Subtraction*
 - *Floating-Point (Real) Representation*
 - *Arithmetic Operations $/, *, -, +$:*
- **Character Representation**
 - *ASCII Character Codes*
 - *Instruction Set Representation*

الكتب الأساسية:

Java how to program : Deitel and Deitel.

المرجع المساند:

Damel, Systems programmed