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| **Category** | **Java** | **.Net** |
| Runtime Compiler | JVM | CLR - Common Language Runtime |
| Rule Book | JSR – Java Specification Requests | CLS – Common Language Specification |
| Foundation | Apache Foundation | .Net Foundation |
| Code After Compilation | Byte Code | IL - Inter mediatory Language |
| Executable File | .class | .exe same as in CPP |
| Zip files Format | .jar | Since Executable files in .Net Combine Group of program files are called as Assembly. Notation - .exe or .dll  (.exe has PEEP and .dll doesn’t have PEEP) |

Types of Software’s

* Executable Software’s
* Libraries

How exe files work?

* App -> exe files -> PEEP (Portable Executable Entry Point / Main)

Disassembly

* Disassembly – ILDASM (type in VS Dev Cmd Prompt)
* Obfuscation (Digital Sign) to abstract the source code to prevent disassembly.

Assembly

* It is a deployable unit.
* An assembly consists of one or more program files (i.e.) one exe and one (or) more dll.

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| Short Notes\*   * Program Files can consist of one or more Classes. * A Class consists of one or more Methods. * A Method consists of one or more Instructions. * An Instruction is a command to the runtime to perform a task. |

Self-Study

* Data Types
* Var Declarations
* Statements
  + Conditional Statements
    - If
    - Elseif
    - Switch
  + Looping Statements
    - For
    - Do…while
* Operators
* Exception Handling
* Arrays
* Collections
* String Handling
* Threads
* Networks and sockets
* Input out streams
* File handling
* OOPs
* Memory Management and Garbage Collection
* Security
* Database Access
* Collections
* Generics(java and .net
* Events and event handling
* LINQ – Language Integration Query Language to extract Data from Data Structures

Data Types

* Value Types primitive
  + Strut
    - Byte (0 to 255)
      * sbyte (-128 to 127)
    - Short
    - Int
    - Long
    - Float
    - Double
    - Char
    - Boolean
* Reference Types Objects
  + Class
  + Interface
  + Array
  + Delegates
    - They are Functional pointers to a function.

Class

* Namespace is a virtual boundary.
* Using is import class.