* JAVA
  + Java is a

**programming language** and a **platform**.

Java is a

-high level,

-robust,

-object-oriented and secure programming language.

* + 3 Types of Java variables
    - Instance
    - Local
    - Static
  + Datatypes
    - Primitive
      * Boolean -1bit
      * Short-2 byte
      * Int-4 byte
      * Char-2 byte
      * Long-8 byte
      * Double-8 byte
      * Float-4byte
    - Non-primitive
      * Class
      * Arrays
      * Interfaces
  + OOPS
    - Inheritance
    - Abstraction
    - Polymorphism
    - Object
    - Class
  + Control Statements
    - Looping Statement
      * For
      * Do-while
      * While
      * Enhanced for loop
    - Decision making statements
      * If
      * Switch
      * If else
    - Jumping Statements
      * Break
      * Continue
  + Access modifiers
    - Public : The access level of a public modifier is everywhere. It can be accessed from within the class, outside the class, within the package and outside the package.
    - Protected : The access level of a protected modifier is within the package and outside the package through child class. If you do not make the child class, it cannot be accessed from outside the package.
    - Private : The access level of a private modifier is only within the class. It cannot be accessed from outside the class.
    - Default: The access level of a default modifier is only within the package. It cannot be accessed from outside the package. If you do not specify any access level, it will be the default.
  + Constructors
    - Java constructors- A constructor in Java is a special method that is used to initialize objects. The constructor is called when an object of a class is created. It can be used to set initial values for object attributes.
    - If a constructor is declared as private, then **its objects are only accessible from within the declared class**. You cannot access its objects from outside the constructor class.
    - Java compiler automatically creates a default constructor (Constructor with no arguments) in case no constructor is **present in the java class**
  + Static Keyword
* The **static keyword** in [Java](https://www.javatpoint.com/java-tutorial) is used for memory management mainly. We can apply static keyword with [variables](https://www.javatpoint.com/java-variables), methods, blocks and [nested classes](https://www.javatpoint.com/java-inner-class). The static keyword belongs to the class than an instance of the class.
  + This pointer
  + Super
  + Method overloading
    - If a class has multiple methods having same name but different in parameters, it is known as Method Overloading.
  + Method Overriding
    - If subclass (child class) has the same method as declared in the parent class, it is known as **method overriding in Java.**