KEYWORDS IN JAVA

- **Introduction**

In Java, Keywords or Reserved words are the words in a language that are used for some internal process or represent some predefined actions. These words are therefore not allowed to use as variable names or objects.

- **Important Keywords in Java**

Keywords refer to the reserved set of words of a language. These are used for some predefined actions.

- **abstract:** It is a non-access modifier applicable for classes and methods. It is used to achieve abstraction. For more, refer to abstract keyword in java.
- **Enum:** It is used to define Enum in java.
- **Instance of:** It is used to know whether the object is an instance of the specified type (class or subclass or interface).

- **private:** It is an access modifier. Anything declared private cannot be seen outside of its class.
- **protected:** If you want to allow an element to be seen outside your current package, but only to classes that subclass your class directly, then declare that element protected.
- **public:** Anything declared public can be accessed from anywhere. For more on Access Modifiers, refers as access modifier in java.
- **static:** It is used to create a member(block, method, variable, nested classes) that can be used by itself, without reference to a specific instance. For more, refer static keyword in java.
- **synchronized:** Applicable for blocks methods. It is used to get synchronization in java. For more, refer as synchronized in java.
- **transient:** transient is a variables modifier used is serialization. At the time of serialization, if we don't want to save the value of a particular variable in a file, then we use the transient

keyword. For more refers transient keyword in java.

- **volatile**: The volatile modifier tells the compiler that the variable modified by volatile can be changed unexpectedly by other parts of your program.
- **Static**:

  The static keyword in Java is mainly used for memory management. The static keyword in Java is used to share the same variable or method of a given class. The users can apply static keywords with variables, methods, blocks, and nested classes. The static keyword belongs to the class rather than an instance of the class. The static keyword is used for a constant variable or a method that is the same for every instance of a class.

  - **Final:**
    The final method in Java is used as a non-access modifier applicable only to a variable,

a method, or a class. For more, refer to volatile keyword in java.
When a variable is declared with the *final keyword*, its value can't be changed, essentially, a constant. This also means that you must initialize a final variable.

- **super:**
  The super keyword in Java is a reference variable that is used to refer to parent class when we're working with objects. You need to know the basics of inheritance and polymorphism to understand the Java super keyword.
  super is used to call a superclass constructor**:** When a subclass is created, its constructor must call the constructor of its parent class. This is done using the super() keyword, which calls the constructor of the parent class.

- **Transient:**
  transient is a variables modifier used in serialization. At the time of serialization, if we don’t want to save value of a particular variable in a file, then we use transient keyword. When JVM comes across transient keyword, it ignores original value of the variable and save default value of that variable data type.

- **Abstract:**
  In Java, abstract is a non-access modifier in java applicable for classes, and methods
  but not variables. It is used to achieve abstraction which is one of the pillars of Object Oriente Programming (OOP). Following are different contexts where *abstract* can be used in Java.

- **Protected:**

The methods or variables declared as protected are accessible within the same package or different packages. By using protected keywords, we can declare the methods/variables protected.

- **Private:**
  The methods or variables that are declared as private are accessible only within the class in which they are declared. By using *private* keyword we can set methods/variables private.

- **Public:**
  The public keyword in Java is an access modifier used to define the access level of classes, methods, and variables. When a member is declared as public, it can be accessed from any other class, regardless of the package it belongs to.