#### **CORE JAVA**

#### Basics of Java

- Java What, Where and Why? <a href="https://www.javatpoint.com/java-tutorial">https://www.javatpoint.com/java-tutorial</a>
- History and Features of Java <a href="https://www.javatpoint.com/history-of-java">https://www.javatpoint.com/history-of-java</a>
- Internals of Java Program <a href="https://www.javatpoint.com/internal-details-of-hello-java-program">https://www.javatpoint.com/internal-details-of-hello-java-program</a>
- Difference between JDK,JRE and JVM <a href="https://www.javatpoint.com/difference-between-jdk-jre-and-jvm">https://www.javatpoint.com/difference-between-jdk-jre-and-jvm</a>
- Internal Details of JVM <a href="https://www.javatpoint.com/internal-details-of-jvm">https://www.javatpoint.com/internal-details-of-jvm</a>;;;
- video link <a href="https://www.youtube.com/watch?v=uWYPVz">https://www.youtube.com/watch?v=uWYPVz</a> i7W4
- Variable and Data Type <a href="https://www.javatpoint.com/variable-datatype">https://www.javatpoint.com/variable-datatype</a>
- Naming Convention <a href="https://www.javatpoint.com/java-naming-conventions">https://www.javatpoint.com/java-naming-conventions</a>

## **OOPS** Concepts

- Advantage of OOPs <a href="https://www.javatpoint.com/java-oops-concepts">https://www.javatpoint.com/java-oops-concepts</a>
- Object and Class <a href="https://www.javatpoint.com/object-and-class-in-java">https://www.javatpoint.com/object-and-class-in-java</a>
- Method Overloading <a href="https://www.javatpoint.com/method-overloading-in-java">https://www.javatpoint.com/method-overloading-in-java</a>
- Constructor <a href="https://www.javatpoint.com/java-constructor">https://www.javatpoint.com/java-constructor</a>
- static variable, method and block <a href="https://www.javatpoint.com/static-keyword-in-java">https://www.javatpoint.com/static-keyword-in-java</a>
- this keyword <a href="https://www.javatpoint.com/this-keyword">https://www.javatpoint.com/this-keyword</a>
- Inheritance (IS-A) <a href="https://www.javatpoint.com/inheritance-in-java">https://www.javatpoint.com/inheritance-in-java</a>
- Aggregation and Composition(HAS-A) <a href="https://www.javatpoint.com/aggregation-in-java">https://www.javatpoint.com/aggregation-in-java</a>
- Method Overriding <a href="https://www.javatpoint.com/method-overriding-in-java">https://www.javatpoint.com/method-overriding-in-java</a>
- Covariant Return Type <a href="https://www.javatpoint.com/covariant-return-type">https://www.javatpoint.com/covariant-return-type</a>
- super keyword <a href="https://www.javatpoint.com/super-keyword">https://www.javatpoint.com/super-keyword</a>
- final keyword <a href="https://www.javatpoint.com/final-keyword">https://www.javatpoint.com/final-keyword</a>
- Runtime Polymorphism <a href="https://www.javatpoint.com/runtime-polymorphism-in-java">https://www.javatpoint.com/runtime-polymorphism-in-java</a>
- //static and Dynamic binding <a href="https://www.javatpoint.com/static-binding-and-dynamic-binding">https://www.javatpoint.com/static-binding-and-dynamic-binding</a>
- Abstract class and Interface <a href="https://www.javatpoint.com/abstract-class-in-java">https://www.javatpoint.com/abstract-class-in-java</a>
- Downcasting with instanceof operator <a href="https://www.javatpoint.com/downcasting-with-instanceof-operator">https://www.javatpoint.com/downcasting-with-instanceof-operator</a>
- Package and Access Modifiers <a href="https://www.javatpoint.com/package">https://www.javatpoint.com/package</a>
- Encapsulation <a href="https://www.javatpoint.com/encapsulation">https://www.javatpoint.com/encapsulation</a>
- Object class <a href="https://www.javatpoint.com/object-class">https://www.javatpoint.com/object-class</a>
- Java Array <a href="https://www.javatpoint.com/array-in-java">https://www.javatpoint.com/array-in-java</a>
- Call By Value and Call By Reference <a href="https://www.javatpoint.com/call-by-value-and-call-by-reference-in-java">https://www.javatpoint.com/call-by-value-and-call-by-reference-in-java</a>

Wrapper CLass - <a href="https://www.javatpoint.com/wrapper-class-in-java">https://www.javatpoint.com/wrapper-class-in-java</a>

## String Handling

- String: What and Why? <a href="https://www.javatpoint.com/java-string">https://www.javatpoint.com/java-string</a>
- Immutable String <a href="https://www.javatpoint.com/immutable-string">https://www.javatpoint.com/immutable-string</a>
- String Comparison <a href="https://www.javatpoint.com/string-comparison-in-java">https://www.javatpoint.com/string-comparison-in-java</a>
- String Concatenation <a href="https://www.javatpoint.com/string-concatenation-in-java">https://www.javatpoint.com/string-concatenation-in-java</a>
- Substring <a href="https://www.javatpoint.com/substring">https://www.javatpoint.com/substring</a>
- Methods of String class <a href="https://www.javatpoint.com/methods-of-string-class">https://www.javatpoint.com/methods-of-string-class</a>
- StringBuffer class <a href="https://www.javatpoint.com/StringBuffer-class">https://www.javatpoint.com/StringBuffer-class</a>
- StringBuilder class <a href="https://www.javatpoint.com/StringBuilder-class">https://www.javatpoint.com/StringBuilder-class</a>
- String vs StringBuffer vs StringBuilder <a href="https://www.javatpoint.com/difference-between-string-and-stringbuffer">https://www.javatpoint.com/difference-between-stringbuffer</a> and-stringbuffer , <a href="https://www.javatpoint.com/difference-between-stringbuffer-and-stringbuilder">https://www.javatpoint.com/difference-between-stringbuffer-and-stringbuilder</a>
- Creating Immutable class <a href="https://www.javatpoint.com/how-to-create-immutable-class">https://www.javatpoint.com/how-to-create-immutable-class</a>
- toString method <a href="https://www.javatpoint.com/understanding-toString">https://www.javatpoint.com/understanding-toString</a>()-method
- StringTokenizer class <a href="https://www.javatpoint.com/string-tokenizer-in-java">https://www.javatpoint.com/string-tokenizer-in-java</a>
- Methods(All Methods Under this Section) <a href="https://www.javatpoint.com/java-string-charat">https://www.javatpoint.com/java-string-charat</a>

## **Exception Handling**

- Exception Handling: What and Why? https://www.javatpoint.com/exception-handling-in-java
- try and catch block <a href="https://www.javatpoint.com/try-catch-block">https://www.javatpoint.com/try-catch-block</a>
- Multiple catch block <a href="https://www.javatpoint.com/multiple-catch-block-in-java">https://www.javatpoint.com/multiple-catch-block-in-java</a>
- Nested try <a href="https://www.javatpoint.com/nested-try-block">https://www.javatpoint.com/nested-try-block</a>
- try with resources <a href="https://www.javatpoint.com/java-try-with-resources">https://www.javatpoint.com/java-try-with-resources</a>
- finally block https://www.javatpoint.com/finally-block-in-exception-handling
- throw keyword <a href="https://www.javatpoint.com/throws-keyword-and-difference-between-throw-and-throws">https://www.javatpoint.com/throws-keyword-and-difference-between-throw-and-throws</a>
- Exception Propagation <a href="https://www.javatpoint.com/exception-propagation">https://www.javatpoint.com/exception-propagation</a>
- throws keyword <a href="https://www.javatpoint.com/throws-keyword-and-difference-between-throw-and-throws">https://www.javatpoint.com/throws-keyword-and-difference-between-throw-and-throws</a>
- Exception Handling with Method Overriding <a href="https://www.javatpoint.com/exception-handling-with-method-overriding">https://www.javatpoint.com/exception-handling-with-method-overriding</a>
- Custom Exception https://www.javatpoint.com/custom-exception

## Nested Classes(Refer below Headings) - <a href="https://www.javatpoint.com/java-inner-class">https://www.javatpoint.com/java-inner-class</a>

- Nested Class: What and Why?
- Member Inner class
- Annonymous Inner class

- Local Inner class
- static nested class
- Nested Interface

# Collection - https://www.javatpoint.com/collections-in-java

- Collection Framework
- ArrayList class
- LinkedList class
- ListIterator interface
- HashSet class
- LinkedHashSet class
- TreeSet class
- Map interface
- HashMap class
- LinkedHashMap class
- TreeMap class
- Hashtable class
- Comparable and Comparator
- Properties class
- Refer this link for furthur reference <a href="http://www.java67.com/2013/01/difference-between-set-list-and-map-in-java.html">http://www.java67.com/2013/01/difference-between-set-list-and-map-in-java.html</a>