Java Basics

[What is Java?](https://www.geeksforgeeks.org/introduction-to-java)

[Download and Install Java?](https://www.geeksforgeeks.org/how-to-download-and-install-java-for-64-bit-machine)

[JDK vs JRE vs JVM](https://www.geeksforgeeks.org/differences-jdk-jre-jvm)

[Identifiers](https://www.geeksforgeeks.org/java-identifiers)

[Keywords](https://www.geeksforgeeks.org/list-of-all-java-keywords)

[Data Types](https://www.geeksforgeeks.org/data-types-in-java)

[Variables](https://www.geeksforgeeks.org/variables-in-java)

[Operators](https://www.geeksforgeeks.org/operators-in-java)

[Decision Making (if, if-else, switch, break, continue, jump)](https://www.geeksforgeeks.org/decision-making-javaif-else-switch-break-continue-jump/)

[Loops](https://www.geeksforgeeks.org/loops-in-java/)

Quizzes: [Java Data Types](https://www.geeksforgeeks.org/quizzes/data-types-2-gq/)

Java Methods

[Introduction to Methods](https://www.geeksforgeeks.org/methods-in-java)

[How to Call Methods?](https://www.geeksforgeeks.org/different-method-calls-in-java/)

[Static Methods vs Instance Methods](https://www.geeksforgeeks.org/static-methods-vs-instance-methods-java)

[Access Modifiers](https://www.geeksforgeeks.org/access-modifiers-java/)

[Command Line Arguments](https://www.geeksforgeeks.org/command-line-arguments-in-java/)

[Variable Arguments (Varargs)](https://www.geeksforgeeks.org/variable-arguments-varargs-in-java/)

Java Arrays

[Introduction to Arrays](https://www.geeksforgeeks.org/arrays-in-java)

[Declare and Initialize Arrays](https://www.geeksforgeeks.org/how-to-initialize-an-array-in-java/)

[Multi-Dimensional Arrays](https://www.geeksforgeeks.org/multidimensional-arrays-in-java)

[Jagged Arrays](https://www.geeksforgeeks.org/jagged-array-in-java)

[Arrays Class](https://www.geeksforgeeks.org/array-class-in-java)

[Final Arrays](https://www.geeksforgeeks.org/final-arrays-in-java)

[Java Array Programs](https://www.geeksforgeeks.org/tag/java-array-programs)

Quizzes: [Java Arrays](https://www.geeksforgeeks.org/quizzes/arrays-gq/)

Java Strings

[Introduction of Strings](https://www.geeksforgeeks.org/strings-in-java)

[Why Strings are Immutable?](https://www.geeksforgeeks.org/java-string-is-immutable-what-exactly-is-the-meaning)

[Java String Concatenation](https://www.geeksforgeeks.org/java-string-concat-examples/)

[String Class](https://www.geeksforgeeks.org/string-class-in-java)

[StringBuffer Class](https://www.geeksforgeeks.org/stringbuffer-class-in-java)

[StringBuilder Class](https://www.geeksforgeeks.org/stringbuilder-class-in-java-with-examples)

[Strings vs StringBuffer vs StringBuilder](https://www.geeksforgeeks.org/string-vs-stringbuilder-vs-stringbuffer-in-java)

[Java String Programs](https://www.geeksforgeeks.org/tag/java-string-programs)

Java OOPs Concepts

[What are OOPs Concepts?](https://www.geeksforgeeks.org/object-oriented-programming-oops-concept-in-java)

[Classes and Objects](https://www.geeksforgeeks.org/classes-objects-java)

[Constructors](https://www.geeksforgeeks.org/constructors-in-java)

[Object Class](https://www.geeksforgeeks.org/object-class-in-java)

[Abstraction](https://www.geeksforgeeks.org/abstraction-in-java-2)

[Encapsulation](https://www.geeksforgeeks.org/encapsulation-in-java)

[Inheritance](https://www.geeksforgeeks.org/inheritance-in-java)

[Polymorphism](https://www.geeksforgeeks.org/polymorphism-in-java)

[Compile-Time Polymorphism (Method Overloading)](https://www.geeksforgeeks.org/method-overloading-in-java/)

[Runtime Polymorphism (Method Overriding)](https://www.geeksforgeeks.org/overriding-in-java/)

[Packages](https://www.geeksforgeeks.org/packages-in-java/)

Quizzes: [Constructors](https://www.geeksforgeeks.org/quizzes/constructors-2-gq/), [Packages](https://www.geeksforgeeks.org/quizzes/packages-gq/), [Classes and Objects](https://www.geeksforgeeks.org/quizzes/class-and-object-2-gq/)

Java Interfaces

[Java Interfaces](https://www.geeksforgeeks.org/interfaces-in-java)

[Interfaces and Inheritance](https://www.geeksforgeeks.org/interfaces-and-inheritance-in-java)

[Class vs Interface](https://www.geeksforgeeks.org/differences-between-interface-and-class-in-java)

[Functional Interface](https://www.geeksforgeeks.org/functional-interfaces-java)

[Nested Interface](https://www.geeksforgeeks.org/interface-nested-class-another-interface)

[Marker Interface](https://www.geeksforgeeks.org/marker-interface-java)

[Comparator Interface](https://www.geeksforgeeks.org/comparator-interface-java)

Quizzes: [Interface and Abstract Class](https://www.geeksforgeeks.org/quizzes/abstract-class-and-interface-in-java-gq/)

Java Collections

[Java Collection Framework](https://www.geeksforgeeks.org/collections-in-java-2)

[Collections Class](https://www.geeksforgeeks.org/collections-class-in-java)

[Collection Interface](https://www.geeksforgeeks.org/collection-interface-in-java-with-examples)

[List Interface](https://www.geeksforgeeks.org/list-interface-java-examples)

[ArrayList Class](https://www.geeksforgeeks.org/arraylist-in-java)

[Vector Class](https://www.geeksforgeeks.org/java-util-vector-class-java)

[LinkedList Class](https://www.geeksforgeeks.org/linked-list-in-java)

[Stack Class](https://www.geeksforgeeks.org/stack-class-in-java)

[Set Interface](https://www.geeksforgeeks.org/set-in-java)

[HashSet Class](https://www.geeksforgeeks.org/hashset-in-java)

[TreeSet Class](https://www.geeksforgeeks.org/treeset-in-java-with-examples)

[LinkedHashSet Class](https://www.geeksforgeeks.org/linkedhashset-in-java-with-examples)

[Queue Interface](https://www.geeksforgeeks.org/queue-interface-java)

[Priority Queue Class](https://www.geeksforgeeks.org/priority-queue-class-in-java-2)

[Deque Interface](https://www.geeksforgeeks.org/deque-interface-java-example/)

[Map Interface](https://www.geeksforgeeks.org/map-interface-java-examples)

[HashMap Class](https://www.geeksforgeeks.org/java-util-hashmap-in-java)

[LinkedHashMap Class](https://www.geeksforgeeks.org/linkedhashmap-class-java-examples)

[HashTable Class](https://www.geeksforgeeks.org/hashtable-in-java)

[Dictionary](https://www.geeksforgeeks.org/java-util-dictionary-class-java)

[SortedSet Interface](https://www.geeksforgeeks.org/sortedset-java-examples)

[Comparator Interface](https://www.geeksforgeeks.org/comparator-interface-java)

[Comparable Interface](https://www.geeksforgeeks.org/comparable-interface-in-java-with-examples/)

[Comparator vs Comparable](https://www.geeksforgeeks.org/comparable-vs-comparator-in-java)

[Iterator](https://www.geeksforgeeks.org/iterators-in-java)

Java Exception Handling

[Java Exceptions](https://www.geeksforgeeks.org/exceptions-in-java/)

[Checked vs Unchecked Exceptions](https://www.geeksforgeeks.org/checked-vs-unchecked-exceptions-in-java/)

[Try Catch Block](https://www.geeksforgeeks.org/try-catch-throw-and-throws-in-java/)

[Final, Finally and Finalize](https://www.geeksforgeeks.org/g-fact-24-finalfinally-and-finalize-in-java/)

[Throw and Throws](https://www.geeksforgeeks.org/throw-throws-java/)

[Customized Exception Handling](https://www.geeksforgeeks.org/user-defined-custom-exception-in-java/)

[Chained Exceptions](https://www.geeksforgeeks.org/chained-exceptions-java/)

[Null Pointer Exceptions](https://www.geeksforgeeks.org/null-pointer-exception-in-java/)

[Exception Handling with Method Overriding](https://www.geeksforgeeks.org/exception-handling-with-method-overriding-in-java/)

Quizzes: [Exception Handling](https://www.geeksforgeeks.org/quizzes/exception-handling-2-gq/)

Java Multithreading

[Introduction to Java Multithreading](https://www.geeksforgeeks.org/java-multithreading-tutorial/)

[Threads](https://www.geeksforgeeks.org/java-threads/)

[Thread Class](https://www.geeksforgeeks.org/java-lang-thread-class-java)

[Runnable Interface](https://www.geeksforgeeks.org/runnable-interface-in-java)

[Lifecycle and States of a Thread](https://www.geeksforgeeks.org/lifecycle-and-states-of-a-thread-in-java/)

[Main Thread](https://www.geeksforgeeks.org/main-thread-java)

[Thread Priority in Multithreading](https://www.geeksforgeeks.org/java-thread-priority-multithreading/)

[Naming & Feteching Name of Current Thread](https://www.geeksforgeeks.org/naming-thread-fetching-name-current-thread-java/)

[Thread.start() vs Thread.run() Method](https://www.geeksforgeeks.org/difference-between-thread-start-and-thread-run-in-java/)

[Thread.sleep() Method](https://www.geeksforgeeks.org/thread-sleep-method-in-java-with-examples/)

[Daemon Thread](https://www.geeksforgeeks.org/daemon-thread-java/)

[Thread Safety](https://www.geeksforgeeks.org/thread-safety-and-how-to-achieve-it-in-java/)

[Thread Pools](https://www.geeksforgeeks.org/thread-pools-java/)

Java File Handling

[File Handling](https://www.geeksforgeeks.org/file-handling-in-java/)

[File Class](https://www.geeksforgeeks.org/file-class-in-java)

[Create Files](https://www.geeksforgeeks.org/java-program-to-create-a-new-file)

[Read Files](https://www.geeksforgeeks.org/different-ways-reading-text-file-java)

[Write on Files](https://www.geeksforgeeks.org/java-program-to-write-into-a-file)

[Delete File](https://www.geeksforgeeks.org/delete-file-using-java)

[FileReader Class](https://www.geeksforgeeks.org/java-io-filereader-class/)

[FileWriter Class](https://www.geeksforgeeks.org/filewriter-class-in-java)

[FilePermission Class](https://www.geeksforgeeks.org/java-io-filepermission-class-java/)

[FileDescriptor Class](https://www.geeksforgeeks.org/java-io-filedescriptor-java)

Java Streams and Lambda Expressions

[Lambda Expressions](https://www.geeksforgeeks.org/lambda-expressions-java-8/)

[Method References](https://www.geeksforgeeks.org/method-references-in-java-with-examples/)

[Java Stream - Complete Tutorial](https://www.geeksforgeeks.org/java-8-stream-tutorial/)

[Java 8 Features - Complete Tutorial](https://www.geeksforgeeks.org/java-8-features/)

Java IO

[Introduction to Java IO](https://www.geeksforgeeks.org/java-io-input-output-in-java-with-examples)

[Reader Class](https://www.geeksforgeeks.org/java-io-reader-class-java)

[Writer Class](https://www.geeksforgeeks.org/java-io-writer-class-java)

[FileInput Stream](https://www.geeksforgeeks.org/java-io-fileinputstream-class-java)

[FileOutput Stream](https://www.geeksforgeeks.org/fileoutputstream-in-java)

[BufferedReader Input Stream](https://www.geeksforgeeks.org/ways-to-read-input-from-console-in-java)

[BufferedReader Output stream](https://www.geeksforgeeks.org/java-io-bufferedoutputstream-class-java)

[BufferedReader vs Scanner](https://www.geeksforgeeks.org/difference-between-scanner-and-bufferreader-class-in-java)

[Fast I/O](https://www.geeksforgeeks.org/fast-io-in-java-in-competitive-programming)

Java Synchronization

[Java Synchronization](https://www.geeksforgeeks.org/synchronized-in-java)

[Importance of Thread Synchronization](https://www.geeksforgeeks.org/importance-of-thread-synchronization-in-java)

[Method and Block Synchronization](https://www.geeksforgeeks.org/method-block-synchronization-java)

[Atomic vs Volatile vs Synchronized](https://www.geeksforgeeks.org/difference-between-atomic-volatile-and-synchronized-in-java)

[Local Frameworks vs Thread Synchronization](https://www.geeksforgeeks.org/lock-framework-vs-thread-synchronization-in-java)

[Deadlock in Multithreading](https://www.geeksforgeeks.org/deadlock-in-java-multithreading)

[Deadlock Prevention and Avoidance](https://www.geeksforgeeks.org/deadlock-prevention)

[Lock vs Monitor in Concurrency](https://www.geeksforgeeks.org/difference-between-lock-and-monitor-in-java-concurrency)

[Reentrant Lock](https://www.geeksforgeeks.org/reentrant-lock-java)

Java Regex

[What is Java Regex?](https://www.geeksforgeeks.org/regular-expressions-in-java)

[Pattern Class](https://www.geeksforgeeks.org/pattern-pattern-method-in-java-with-examples)

[Matcher Class](https://www.geeksforgeeks.org/matcher-pattern-method-in-java-with-examples)

[Character Class](https://www.geeksforgeeks.org/java-lang-character-class-methods-set-1)

[Quantifiers](https://www.geeksforgeeks.org/quantifiers-in-java)

Java Networking

[Introduction to Java Networking](https://www.geeksforgeeks.org/java-networking)

[TCP Architecture](https://www.geeksforgeeks.org/tcp-ip-model)

[UDP Architecture](https://www.geeksforgeeks.org/user-datagram-protocol-udp)

[IPV4 vs IPV6](https://www.geeksforgeeks.org/differences-between-ipv4-and-ipv6)

[Connection-Oriented vs Connectionless Protocols](https://www.geeksforgeeks.org/difference-between-connection-oriented-and-connection-less-services)

[Socket Programming](https://www.geeksforgeeks.org/socket-programming-in-java)

[Server Socket Class](https://www.geeksforgeeks.org/java-net-serversocket-class-in-java)

[URL Class and Methods](https://www.geeksforgeeks.org/url-class-java-examples)

Java Database Connectivity(JDBC)

[Introduction to Java JDBC](https://www.geeksforgeeks.org/introduction-to-jdbc)

[JDBC Driver](https://www.geeksforgeeks.org/jdbc-drivers)

[JDBC Connection](https://www.geeksforgeeks.org/establishing-jdbc-connection-in-java)

[Types of Statements in JDBC](https://www.geeksforgeeks.org/types-of-statements-in-jdbc)

Java Memory Allocation

[Java Memory Management](https://www.geeksforgeeks.org/java-memory-management)

[How Java Objects Stored in Memory?](https://www.geeksforgeeks.org/g-fact-46)

[Stack vs Heap Memory Allocation](https://www.geeksforgeeks.org/stack-vs-heap-memory-allocation)

[Java Virtual Machine(JVM) Stack Area](https://www.geeksforgeeks.org/java-virtual-machine-jvm-stack-area)

[Types of Memory Areas Allocated by JVM](https://www.geeksforgeeks.org/how-many-types-of-memory-areas-are-allocated-by-jvm)

[Garbage Collection](https://www.geeksforgeeks.org/garbage-collection-java)

[Types of JVM Garbage Collectors](https://www.geeksforgeeks.org/types-of-jvm-garbage-collectors-in-java-with-implementation-details)

[Heap and Stack Memory Allocation](https://www.geeksforgeeks.org/stack-vs-heap-memory-allocation)

[Memory Leaks](https://www.geeksforgeeks.org/memory-leaks-java)

Java Interview Questions

[200+ Core Java Interview Questions and Answers](https://www.geeksforgeeks.org/java-interview-questions/)

[Java MCQ](https://www.geeksforgeeks.org/java-multiple-choice-questions/)

Java Practice Problems

[Java Programming Examples](https://www.geeksforgeeks.org/java-programming-examples)

[Java Exercises – Basic to Advanced Java Practice Programs](https://www.geeksforgeeks.org/java-exercises)

[Java Language MCQs with Answers](https://www.geeksforgeeks.org/50-java-language-mcqs-with-answers-2)

[Java Practice Quiz](https://www.geeksforgeeks.org/java-gq)

Java Projects

[Number Guessing Game](https://www.geeksforgeeks.org/number-guessing-game-in-java/)

[Simple Banking Application](https://www.geeksforgeeks.org/mini-banking-application-in-java/)

[Currency Converter](https://www.geeksforgeeks.org/java-program-to-convert-currency-using-awt/)

[Tic-Tac-Toe Game](https://www.geeksforgeeks.org/tic-tac-toe-game-in-java/)

[Snake Game](https://www.geeksforgeeks.org/design-snake-game/)

[Memory Game](https://www.geeksforgeeks.org/memory-game-in-java/)

[Chat Application](https://www.geeksforgeeks.org/simple-chat-application-using-sockets-in-java/)

[Face Detection System](https://www.geeksforgeeks.org/image-processing-in-java-face-detection/)

[Social Networking Site](https://www.geeksforgeeks.org/design-scalable-system-like-instagram/)

[Text Editor](https://www.geeksforgeeks.org/java-swing-create-a-simple-text-editor/)

Java Jobs & Opportunities

According to report of Statista, Java is most demanded programming languages after JavaScript by recruiters worldwide in 2024. Major MNC companies are recruiting Java Programmers.

[Amazon](https://www.geeksforgeeks.org/amazon-recruitment-process)

[IBM](https://www.geeksforgeeks.org/ibm-recruitment-process)

[Google](https://www.geeksforgeeks.org/google-recruitment-process)

[Honeywell](https://www.geeksforgeeks.org/honeywell-technology-recruitment-process)

[Netflix](https://www.geeksforgeeks.org/netflix-recruitment-process)

[Meta](https://www.geeksforgeeks.org/facebookmeta-recruitment-process)

[Wipro](https://www.geeksforgeeks.org/wipro-recruitment-process)

[Infosys](https://www.geeksforgeeks.org/infosys-recruitment-process)

[Accenture](https://www.geeksforgeeks.org/accenture-recruitment-process)

[Oracle Inc](https://www.geeksforgeeks.org/oracle-recruitment-process)

[Deloitte India](https://www.geeksforgeeks.org/deloitte-recruitment-process)

[Cognizant](https://www.geeksforgeeks.org/accenture-recruitment-process)

[Capgemini](https://www.geeksforgeeks.org/capgemini-recruitment-process) and Many more...