

Java Tutorial

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What is Java?

Java is popular high-level, class-based object oriented programming language originally developed by Sun Microsystems and released in 1995. Currently Java is owned by Oracle and more than 3 billion devices run Java. Java runs on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX. Java is used to develop numerious types of software applications like Mobile apps, Web apps, Desktop apps, Games and much more.

Java is a general-purpose programming language intended to let programmers write once, run anywhere (WORA). This means that compiled Java code can run on all platforms that support Java without the need to recompile.

This **Java** Tutorial has been prepared by well experienced Java Programmers for the Software Engineers to help them understand the basic to advanced concepts of Java Programming

Language. After completing this tutorial, you will find yourself at a moderate level of expertise in Java, from where you can take yourself to the next levels.

Java Jobs

Java is very high in demand and all the major companies are recruiting Java Programmers to develop their Desktop, Web and Mobile applications.

Today a Java Programmer with 3-5 years of experience is asking for around \$120,000 annual package and this is the most demanding programming language in America. Though it can vary depending on the location of the Job. Following are the great companies who are using Java and they need good Java Programmers:

- Google
- Microsoft
- Facebook
- IBM
- Amazon
- Netflix
- Pinterest
- Uber
- JetBrains
- Many more...

So, you could be the next potential employee for any of these major companies. We have developed a great learning material for Java which will help you prepare for the technical interviews and certification exams based on Java. So, start learning Java using this simple and effective tutorial from anywhere and anytime absolutely at your pace.

Why to Learn Java?

Java is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Software Development Domain. If you will conduct a servey about the best programming language, Java is sure to come up.

Java is fairly easy to learn, so if you are starting to learn any programming language then Java could be your great choice. There's also plenty of Java tools that make it easy for developers and beginners to use. There are many other good reasons which makes Java as the first choice of any programmer:

Java is Open Source which means its available free of cost.

- Java is simple and so easy to learn
- Java is much in demand and ensures high salary
- · Java has a large vibrant community
- Java has powerful development tools
- Java is platform independent

Java Online Compiler

This tutorial provides enough number of examples to explain to concepts. To compile and execute your examaples in your browser itself, we have provided **Java Online Compiler**. You can **Edit** and **Execute** almost all the examples directly from your browser. Try to click the icon to run the following Java code to print conventional "Hello, World!".

Below code box allows you to change the value of the code. Try to change the value inside **println()** and run it again to verify the result.

```
public class MyFirstJavaProgram {
    /* This is my first java program.
    * This will print 'Hello World' as the output
    */
    public static void main(String []args) {
        System.out.println("Hello World"); // prints Hello World
    }
}
```

Java Applications

The latest release of the Java Standard Edition is Java SE 18. With the advancement of Java and its widespread popularity, multiple configurations were built to suit various types of platforms. For example: J2EE for Enterprise Applications, J2ME for Mobile Applications.

The new J2 versions were renamed as Java SE, Java EE, and Java ME respectively. Java is guaranteed to be **Write Once**, **Run Anywhere**.

- **Multithreaded** With Java's multithreaded feature it is possible to write programs that can perform many tasks simultaneously. This design feature allows the developers to construct interactive applications that can run smoothly.
- **Interpreted** Java byte code is translated on the fly to native machine instructions and is not stored anywhere. The development process is more rapid and analytical since the linking is an incrementa

and light-weight process.

• **High Performance** – With the use of Just-In-Time compilers, Java enables high performance.

- **Distributed** Java is designed for the distributed environment of the internet.
- **Dynamic** Java is considered to be more dynamic than C or C++ since it is designed to adapt to an evolving environment. Java programs can carry extensive amount of run-time information that can be used to verify and resolve accesses to objects on run-time.

Target Audience

This tutorial has been prepared for the beginners to help them understand the basics to advanced concepts of Java programming language. After completing this tutorial, you will find yourself at a moderate level of expertise in Java, from where you can take yourself to the next levels.

Prerequisites

Although it is a beginners tutorial, we assume that the readers have a reasonable exposure to any programming environment and knowledge of basic concepts such as variables, commands, syntax, etc.

Java Questions & Answers

You can explore a set of Java Questions and Answers at Java Questions & Answers