**Introduction to Java**

Last Updated : 09 Jan, 2025

Java is a class-based, **object-oriented programming language** that is designed to have as few implementation dependencies as possible. It is intended to let application developers **Write Once and Run Anywhere (WORA)**, meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. **J**ava was developed by **James Gosling** at **Sun Microsystems Inc**. in **May 1995** and **later acquired by Oracle Corporation**and is widely used for developing applications for desktop, web, and mobile devices.  
  
Java is known for its simplicity, robustness, and security features, making it a popular choice for enterprise-level applications. Java applications are compiled to byte code that can run on any Java Virtual Machine. The syntax of Java is similar to C/C++.

Java makes writing, compiling, and debugging programming easy. It helps to create reusable code and modular programs.

**History of Java**

**Java’s** history is as interesting as it is impactful. The journey of this powerful **programming language** began in 1991 when **James Gosling, Mike Sheridan**, and **Patrick Naughton**, a team of engineers at **Sun Microsystems** known as the “Green Team,” set out to create a new language initially called “Oak.” **Oak** was later renamed **Java**, inspired by **Java coffee**, and was first publicly released in 1996 as **Java 1.0**. This initial version provided a no-cost runtime environment across popular platforms, making it accessible to a broad audience. **Arthur Van Hoff** rewrote the **Java 1.0 compiler** to strictly comply with its specifications, ensuring its reliability and cross-platform capabilities.

* **Java** evolved over time, with **Java 2** introducing multiple configurations tailored for different platforms, showcasing its versatility.
* In 1997, **Sun Microsystems** aimed to formalize **Java** through the **ISO standards body** but eventually withdrew from the process.
* Despite not formalizing through ISO, **Sun Microsystems** offered most **Java implementations** at no cost, earning revenue by licensing specialized products such as the **Java Enterprise System**.
* A significant milestone in **Java’s history** occurred on November 13, 2006, when **Sun Microsystems** released a large portion of the **Java Virtual Machine** (**JVM**) as free, open-source software.
* By May 8, 2007, the core **JVM code** was fully available under open-source distribution terms.
* **Java** was designed with core principles: **simplicity, robustness, security, high performance, portability, multi-threading**, and **dynamic interpretation**. These principles have made **Java** a preferred language for various applications, including mobile devices, **internet programming**, gaming, and **e-business**.
* Today, **Java** continues to be a cornerstone of modern software development, widely used across industries and platforms.