Hello Future AP CS A JAVA students,

Java is a programming language and computing platform first released by Sun Microsystems in 1995. It has evolved from humble beginnings to power a large share of today's digital world, by providing the reliable platform upon which many services and applications are built. New, innovative products and digital services designed for the future continue to rely on Java, as well.

Java is a general-purpose, class-based, object-oriented programming language designed for having lesser implementation dependencies. It is a computing platform for application development - Java is fast, secure, and reliable. Therefore, Java is widely used for developing applications in laptops, data centers, game consoles, scientific supercomputers, cell phones, and many other applications.

<u>Learning Java programming is beneficial because:</u>

- 1. Popularity and Versatility: Java is widely used in enterprise environments and Android app development, making it relevant for many jobs.
- 2. Object-Oriented: It teaches foundational concepts like object-oriented programming, which are applicable across many other languages.
- 3. Rich API: Java offers a vast standard library and integrates well with various systems, easing complex tasks.
- 4. Platform Independence: Java programs can run on any device that supports the Java Virtual Machine (JVM), enhancing its utility across platforms.
- 5. Community and Resources: A large community and abundant resources aid learning and problem-solving.

Java developers make great money!

According to <u>Payscale.com</u>, the median entry-level salary for Java developers is about \$67,000 USD. With a few years of experience, Java developers can expect to meet and exceed \$100,000 USD per year. While salaries vary by company and location, Java salaries are consistently competitive with other common language developer salaries.

What is Java used for?

It is used for developing Android Apps	Scientific Computing Applications
Helps you to create Enterprise Software	Use for Big Data Analytics
Wide range of Mobile java Applications	Java Programming of Hardware devices

2024 Summer Assignment for AP CS A:

Join our 2024 AP CS A Google Classroom for information updates	Code: fnr52ov https://classroom.google.com/c/Njc3Njl4OTUx NjE0?cjc=fnr52ov
Read the introductory article on JAVA 5-10 minutes	Link: https://www.devopsschool.com/blog/what-is-jav https://www.devopsschool.com/blog/what-is-jav https://www.devopsschool.com/blog/what-is-jav https://www.devopsschool.com/blog/what-is-jav a-and-how-it-works-an-overview-and-its-use-cases/
Watch 5 minute Video on What is Java? 5 minutes	Link: https://www.youtube.com/watch?v=mAtkPQO1 FcA
Read Chapter One in the "Starting out with JAVA" reference textbook. 20 minutes	Page 1 to 21 In google classroom, click on the classwork tab, and you will find the textbook link under course materials.

Try some JAVA programming in Code Academy. The complete "Learn JAVA" course covers about 20 hours of introductory materials that you are welcome to work through. We will spend next year learning the JAVA programming language. At a **minimum**, please complete these two short courses on Java and Object oriented programming found in CodeAcademy - Catalog - Java. **See directions below** to access CodeAcademy through our Clever portal. You will get a certificate of completion for these modules as PDFs, and you will submit them in google classroom.

These two modules should take about 8-10 hours to complete.





Instructions for Code Academy **Access Using Clever**

These instructions are for students who were in CS or Engineering classes in 2022-2023 and/or Precalculus.

Calculus/CS - Garner Precalculus - Counce AP CSP - Overvidez Engineering - Pittman

- 1. Go to Clever.com, then sign in as a student using your hartselletigers.org gmail account. This should take you to the HCS clever site, and you will see a teacher page at the top for either Garner, Overvidez, Counce, or Pittman.
- 2. Click on the teacher page, and you will see the Code Academy icon to access Code Academy courses free of charge.
- 3. Click on the **Catalog** at the top of the page, then click on Java. Find the courses shown above "Intro to Java" and "Learning Java: Object Oriented Programming", and enroll in the courses.

Instructions for Code Academy Access

***If you do not see a teacher page after signing into Clever, then just go to the link for code academy:

https://www.codecademy.com/

Create an account using Sign Up, using your school google account. Then go to the catalog and follow

step 3 to the right. You will not have access to PRO content, but you can access programming lessons.

For the students who want to learn more Java over the summer.

This is the complete 16 hour course to learn Java. Our summer assignment only covers the first two modules in the course syllabus.

1. If you cannot access CodeAcademy via Clever, then go directly to the website below.

https://www.codecademy.com/

- 2. Create an account using Sign Up, using your school google account. Then go to the catalog and follow step 3 below. You will not have access to PRO content, but you can access programming lessons.
- 3. Click on the **Catalog** at the top of the page, then click on **Java**. Find the courses shown above "Learning Java Introduction" and "Learning Java: Object Oriented Programming", and enroll in the courses.

