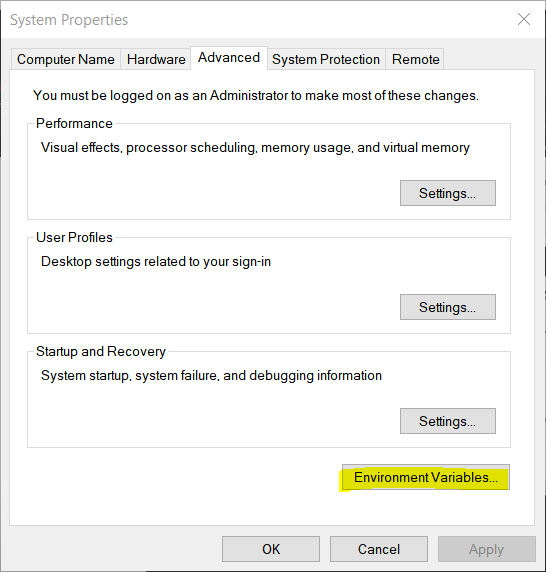
**Core Java**

* **Java:**
  + Java is made by Sun Microsystems in 1995 and later on bought by Oracle and currently Java trademark is held by Oracle. Java is updated every 6 months.
  + Java is mainly used for Mobile development, Web development as well as Enterprise applications. Kotlin, Scala, Groovy come under java technology. Java is the most readable language, we can read code line by line and it is easy to understand.
  + Java has multiple features such as **WORA (Write Once Run Anywhere), multiple thread, Collection API concept, Exception handling and many more**.
* **Setup Java Environment:**
  + **IDE:** To write Java, we can use Notepad and WordPad for simple programming but to work with java professionally, we can use different IDEs(Integrated Development Environment) such as VS Code(Light weight editor), Eclipse and IntelliJ, where we can type the code, compile the code, run the code and debug the code.
    - **VS Code URL:** [**VS Code**](https://code.visualstudio.com/)
  + **Compiler:** To compile the java code, we need to install **JDK (Java Development Kit)** 
    - **JDK URL:** [**Oracle JDK v24**](https://www.oracle.com/java/technologies/downloads/%23java24)
  + Once we complete the installation of IDE and JDK, to verify it, we can run “**JAVA --VERSION**” command to “**CMD**” and it will give you version of Java and JDK installed to the system also by running “**JAVAC --VERSION**” to get the current version and confirmed that compiler installed correctly.

A screenshot of a computer program

AI-generated content may be incorrect.

* + While we check the versions and if we get an error then it means that path for java environment has not set up very well.
  + To set up environment variables, follow the following steps:
    - Start > Search “Edit System Environment Variables”
      * It will open below window, click on “**Environment Variables**”.



* + - * Select “path” and click on “**Edit…**” button under “**System variables**”

A screenshot of a computer program

AI-generated content may be incorrect.

* + - * Click on “**New**” and add “**C:\Program Files\Java\jdk1.8.0\_161\bin**” path or copy the path of **“…\Java\jdk1.8.0\_161\bin**” then click “**OK**”.

A screenshot of a computer program

AI-generated content may be incorrect.

* + - * Click on “**New…**” under “**User variables for…**” then add below values, and click on “**OK**” and “OK” for main window:
        + **Variable Name:** JAVA
        + **Variable value:** “**C:\Program Files\Java\jdk1.8.0\_161\bin**” path or copy the path of **“…\Java\jdk1.8.0\_161\bin**”

A screenshot of a computer

AI-generated content may be incorrect.