

**Topic : Introduction to Java****Learning Level : Easy**

Q. No	Question
<b>Comments and Coding Conventions</b>	
1	Study the importance of comments in Java code for documentation and readability.
2	Learn about JavaDoc comments and how to generate documentation using the JavaDoc tool.
3	Understand coding standards and best practices for writing clean and maintainable code, including naming conventions, indentation, and code organization.
<b>Setting up the Environment – JDK vs JRE vs JVM</b>	
1	Compare the features and functionalities of JDK, JRE, and JVM.
2	Explore the compatibility and versioning considerations when choosing JDK and JRE versions.
3	Experiment with different development tools and IDEs compatible with JDK, such as IntelliJ IDEA and Eclipse.
4	Explore advanced topics related to JDK, JRE, and JVM, such as bytecode manipulation, class loading mechanisms, and JVM tuning techniques.
<b>Core Java Concepts</b>	
1	Study the importance of packages and how to import them.
2	Continuously refine your understanding by revisiting concepts like Java Tokens and reading input through Buffered Reader.
3	Understand the range and size limitations of each primitive data type.
4	Explore the concept of type casting in Java, which involves converting data from one data type to another.
5	Learn how to perform type casting between primitive data types and how to handle potential data loss.

***Success is nothing more than a few simple disciplines practiced everyday***



## SELF STUDY

### SDE Readiness Training

6	Understand the rules of numeric promotion in Java, which determine the result type of arithmetic expressions involving different numeric data types.
7	Study how numeric promotion works for arithmetic operations involving byte, short, char, and int data types.
<b>Debugging Skills</b>	
1	Learn how to debug Java code using breakpoints, watches, and step-by-step execution in your IDE.
2	Practice debugging common errors such as syntax errors, runtime exceptions, and logical errors.
<b>Java Documentation</b>	
1	Familiarize yourself with the Java API documentation to explore available classes and methods.

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