

Day	Topic	Assessment
1	Introduction to Java, History of Java	
2	Download and Install Java for 64-bit, Setting up the environment, Install Eclipse on Windows	
3	JDK in Java, JVM Architecture, JDK vs JRE vs JVM, JIT Compiler, Byte Code vs Machine Code	
4	Java Basic Syntax, Hello World Program, Java Data Types, Primitive vs Object Data Types	
5	Java Identifiers, Operators in Java, Java Variables, Scope of Variables	
6	Wrapper Classes in Java	
7	Assessment - 01	Assessment - 01
8	User Input in Java, Scanner Class	
9	BufferedReader Class, Scanner vs BufferedReader, Console Input	
10	System.out.println, print() vs println(), Formatted Output	
11	Fast I/O in Competitive Programming	
12	Decision Making (if, if-else, switch, break, continue, jump), Java if statement with Examples, Java if-else, if-else-if ladder	
13	Loops in Java, For Loop, Java while loop, do-while loop, For-each loop, Continue and Break statements	
14	Assessment - 02	Assessment - 02
15	Java Arithmetic, Unary Operators	
16	Assignment, Relational Operators	
17	Logical, Ternary, Bitwise Operators	
18	Strings in Java, String Class	
19	String Immutability, StringBuffer, StringBuilder	
20	String vs StringBuilder vs StringBuffer	
21	StringTokenizer, StringJoiner	
22	Assessment - 03	Assessment - 03
23	Arrays in Java, Arrays Class	
24	Multidimensional Arrays, 2-D Arrays	
25	Jagged Arrays, Final Arrays	
26	Reflection Array Class, util.Arrays vs reflect.Array	
27	OOP Concepts, Why Java is not purely Object-Oriented	
28	Classes and Objects, Naming Conventions	
29	Java Methods, Access Modifiers	
30	Assessment - 04	Assessment - 04
31	Constructors, OOP Principles (Inheritance, Abstraction, etc.)	
32	Inheritance and Constructors, Multiple Inheritance	
33	Interfaces, Inheritance Comparison in C++ and Java	
34	Abstract Classes, Abstract vs Interface, Control Abstraction	
35	Abstraction vs Encapsulation	
36	Assessment - 05	Assessment - 05
37	Encapsulation, Inheritance vs Polymorphism	
38	Dynamic Method Dispatch, Compile-time vs Run-time Polymorphism	
39	Java Methods, Method Parameters, Overloading, Scope, Recursion	
40	Classes/Objects, Attributes, Methods, Constructors	
41	Iterator, Wrapper Classes, Exceptions, RegEx, Threads, Lambda	
42	Error Handling: try, catch, finally	
43	Assessment - 06	Assessment - 06