**Java programming day-wise contents**

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| **Day - 1** | * Java Fundamentals - Core Java programming * Object-Oriented Programing Systems - Introduction * Classes, Objects, Constructor, and this() keyword * Polymorphism - Overloading and Constructor Overloading * Relationships and types, Is-a Vs Has-a * Inheritance and Its types, Object class * Super Keyword and base class Constructor calling using super() * Covariant return types * Packages * Access Modifiers Vs Access Specifiers |
| **Day – 2** | * Arrays and String Handling - String, StringBuffer, and StringBuilder classes * StringJoiner Class * Abstract Classes and Interfaces * Default Methods and Static Methods in interfaces * Lambda Expressions * Functional Interfaces - Predicate, Function, Supplier, Consumer, BiPredicate, BiFunction etc., * Constructor Referencing and Method Referencing * Date API |
| **Day – 3** | * Java Exception Handling and handling user-defined exceptions * Optional Class * Java Multithreading * Threads and Executors * Synchronization and Locks * Atomic Variables and ConcurrentMap * Java I/O and Serialization * Java Collection - Framework Introduction and different classes and interfaces in the collection hierarchy * List, Set, Queue, and Map – Interfaces |
| Day – 4 | * Collections and Array Utility class details * Collections with Lambda Expressions * Stream API * Java Database Connectivity - Introduction and types of drivers * Steps to connect to the database * Statement, PreparedStatement, and CallableStatement interfaces and their methods, RowSet |
| **Day – 5** | * Java Servlets and Session Tracking - Cookies and HttpSession * JSP - Lifecycle, implicit Objects, Directives, Action Elements, Expression Language * A basic CRUD Application using an MVC design pattern with Servlets and JSP |