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# **Advance Java**

**Learning Objectives:**

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| **S.No.** | **Learning Objectives** |
| 1 | Increases the advance java skills. |
| 2 | Work with Powerful development tools e.g., Eclipse, Net beans. |
| 3 | Candidate can apply core java concepts here to Built applications. |
| 4 | Going to be familiar with database and designing. |
| 5 | Provides Proper User Interface In Learning Advance Concepts |

**After completion of this course the students shall able to:**

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| **S.No.** | **Learning Outcomes** |
| A. | Start web application development through Servlet and JSP. |
| B. | Go for Framework (Hibernate, Spring). |
| C. | Understand Client-Server Architecture. |
| D. | Able to apply the advance concepts to develop the applications. |
| E. | Develop good program to handle exceptions and errors in program. |

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| **PREREQUESTIES** | Knowledge of Core Java |

**CONTENT OF ADVANCE JAVA TRAINING COURSE**

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| 1 | **Core Java Revision** |
| 2 | **Wrapper Classes**   * Auto Boxing * Auto-UnBoxing |
| 3 | **Collection Framework**   * Introduction to Collection Framework * Interface in Collection Framework * Classes in Collection Framework * Concept of Comparable, Comparator * Cursor |
| 4 | **Structured Query Language**   * Introduction * Data Definition Language * Data Manipulation Language * Concept of Joins |
| 5 | **JDBC**   * Introduction to JDBC * Introduction to JDBC Drivers * Types of JDBC Drivers * Connectivity |
| 6 | **Statement v/s Prepared Statement v/s Callable Statement** |
| 7 | **HTML**   * Introduction * Basic Tags * Form Design |
| 8 | **CSS**   * Introduction * Types of CSS |
| 9 | **JavaScript**   * Introduction * Basic Concepts * JavaScript Pop-Up * Functions * Events * Validations |
| 10 | **Web Application**   * Introduction * Types of server * Http Methods * Client Server Architecture * Common Gateway Interface |
| 11 | **Servlet**   * Introduction to Servlet * Life Cycle of Servlet * Types of Servlet * Basic Servlet with Coding * About configuration file(web.xml) |
| 12 | **Reading Input Parameter, ServletConfig, ServletContext** |
| 13 | **JDBC in Servlet**   * CRUD Operation |
| 14 | **Request Dispatcher and Filter** |
| 15 | **Session Management** |
| 16 | Cookie |
| 17 | URL ReWriting |
| 18 | Hidden Form Field |
| 19 | HttpSession |
| 20 | **Java Server Page(JSP)** |
| 21 | Introduction |
| 22 | Difference between Servlet and JSP |
| 23 | Scripting Elements |
| 24 | Implicit Objects |
| 25 | Directives |
| 26 | Actions Tags |
| 27 | **JDBC in JSP**   * CRUD Operation |
| 28 | **Java Bean class VS POJO class** |
| 29 | **MVC with example** |
| 30 | **Session Handling** |
| 31 | **JSON** |
| 32 | **Ajax** |
| 33 | **Project Work** |