LAKSHMAN\_JAVA\_IT\_SCHOOL



**JDBC:**

ADV. JAVA

1. Validation logic
2. Integration logic
3. **Introduction to JAVA editions and its advantages.**
4. **Types of applications.**
5. **Is java language or technology or platform.**
6. **Types of languages.**
7. **Types of technologies.**
8. **Types of jar files.**
9. **Types of projects.**
10. **Types of archive files and its creation.**
    1. Jar
    2. War
    3. Ear
11. **Types of environment variables settings**
    1. Path
    2. Classpath
    3. JAVA\_HOME
12. **Introduction to JVM memory locations.**
13. **Reflection API.**
    1. Java.lang.Class
    2. Java.lang.Method
    3. Java.lang.Constructor
    4. Java.lang.annotation.Annotation
    5. Java.lang.Field.
14. **Web architecture using jdbc, Servlet, jsp.**
15. **Types of logics.**
    1. Persistence logic
    2. Data gathering logic
    3. Conversion logic
16. Session logic.
17. Middleware logic
18. Business logic
19. View logic
20. **Introduction to persistence stores**
21. **Types of persistence stores**
22. **Drawbacks of file management system.**
23. **Advantages of RDBMS.**
24. **Terminology related persistency.**
    1. Persistence store.
    2. Persistence data.
    3. Persistence logic.
    4. Persistence technology.
    5. Persistence operations.
25. **Introduction to specification and implementation.**
26. **Introduction to new keyword, forName(-), newInstance(-).**
27. **Difference between block and method and constructor.**
28. **Introduction to factory methods.**
29. **Introduction to loosely coupling related to JEE technologies.**
30. **Introduction to ODBC and its disadvantages.**
31. **Introduction to JDBC and its advantages.**
32. **Introduction to JDBC architecture.**
33. **Types of JDBC drivers and its advantages and disadvantages.**
    1. Type-1 driver.
    2. Type-2 driver.
    3. Type-3 driver.
    4. Type-4 driver.
34. **Introduction to JDBC API.**
35. **Sample application on JDBC API.**
36. **Introduction to executeQuery(-), executeUpdate(-), execute(-).**
37. **How to create ConnectionFactory in Jdbc?**
38. **Introduction to statement object and its types.**
    1. Statement
    2. PreparedStatement
    3. CallableStatement
39. **Working with stored procedure by using CallableStatement.**
40. **Working with functions by using CallableStatement**
41. **Introduction to ResultSet object and it types.**
    1. **Forward ResultSet**
    2. **Scrollable ResultSet**
       * Sensitive Scrollable ResultSet
       * Insensitive Scrollable ResultSet
    3. **Updateable ResultSet**
       * Inserting records in table
       * Updating records in table
       * Delete records in table
42. **Information about following methods**
    1. Last(), first(), next(), beforeFirst(), afterLast(), moveToInsertRow(), insertRow(), updateXxx(), deleteRow().
43. **Introduction to Metadata objects.**
    1. ResultSet MetaData.
    2. Database MetaData.
44. **Introduction to SQL99 datatypes.**
    1. **BLOB**
       * Inserting single image into database
       * Inserting multiple images into database
       * Reading single image from database
       * Reading multiple images from database
    2. **CLOB**
       * Inserting single text file into database
       * Inserting multiple text file into database
       * Reading single text file from database
       * Reading multiple text file s from database
    3. Object
    4. Array
45. **Batch Updates.**
    1. Batch updations with Statement object.
    2. Batch updations with PreparedStatement object.
46. **Transaction Management.**
47. **Connection Pooling.**
48. **How to upload video into db.**
49. **Introduction to RowSets.**
    1. **Connected rowsets.**
       * JdbcRowSet
    2. **Disconnected rowsets.**
       * CachedRowSet
       * WebRowSet
       * FilteredRowSet
       * JoinRowSet
50. **How to working both the database(oracle, mysql) from same application.**
51. **Working with java.sql.Date for inserting and reading from table.**
52. **ResourceBundle usage in JDBC**
53. **Java.util.Prperties usage in JDBC**

**SERVLETS:**

1. **Introduction to application.**
2. **Types of applications.**
3. **Introduction to web application and web server and advantages.**
4. **Web server architecture.**
5. **Introduction to singleton design pattern.**
6. **Introduction Servlet**
7. **Servlet execution models.**
   1. Single instance multi thread model.
   2. Multiple instance multi thread model.
8. **Introduction to how many can we develop web component.**
9. **Introduction to web project structure.**
10. **Servlet life cycle phases and methods.**
11. **Drawbacks javax.servlet.Servlet interface.**
12. **Introduction to javax.servlet.GenericServlet.**
13. **Introduction to Eclipse IDE tool.**
14. **Html to Servlet communication.**
15. **Introduction to implicit objects.**
16. **Introduction to ServletRequest and ServletResponse objects.**
17. **Form validations in Servlet.**
    1. Client side validations.
    2. Server side validations.
18. **Working with MIME types.**
19. **Different types of tags related web.xml file**
20. **Difference between default Servlet and welcome Servlet.**
21. **Introduction related ServletConfig and ServletContext objects.**
22. **Working with initialization parameters.**
23. **Introduction to RequestDispatcher object.**
    1. Forward(-,-)
    2. Include(-,-)
24. **Programs on getInitParameters(-), getInitParameterValues(-), getParameterNames(), getParameterMap(), setAttribute(-,-), getAttribute(-), removeAttribute(-), getAttributedNames(), getHeader(-), getHeaders(-), getHeaderNames(-)**
25. **URL and URL types**
    1. Absolute url.
    2. Relative url.
26. **Introduction to javax.servlet.http.HttpServlet.**
27. **Difference between GenericServlet and HttpServlet.**
28. **Difference between doGet() and doPost().**
29. **Fileuploading and FileDownloading.**
30. **Communication between Servlet and database.**
31. **Connection pooling at server side.**
32. **Front Control design pattern.**
33. **Introduction to sendRedirect process.**
34. **Session Tracking.**
35. Cookies.
36. URL rewriting.
37. Hidden Form Fields.
38. Http Session.
39. **Introduction to Filters.**
40. **Introduction to Listeners.**
41. **Introduction to Wrappers.**
42. **Security in Servlets.**

**JSP:**

1. **Introduction to JSP.**
2. **How many ways can we develop web applications.**
3. **Drawbacks of Servlet technology.**
4. **Advantages of JSP technology.**
5. **Life cycle phases and methods of JSP.**
6. **Introduction tag.**
7. **Introduction to jsp implicit objects.**
   1. Page
   2. Request
   3. Response
   4. Application
   5. Config
   6. Exception
   7. pageContext.
   8. Out
   9. Session
8. **Introduction to jsp scope objects**
   1. Request
   2. Response
   3. Application
   4. Session.
9. **Introduction to pageContext object.**
10. **How to configure jsp file in web.xml**
11. **Jsp program in eclipse**
12. **Page implementation class introduction.**
13. **Types of elements.**
    1. **Scripting tags.**

Scriptlet tag. Declaration tag. Expression tag.

* 1. **Directive elements.** @include @page

@taglib

* 1. **Action elements.**

Standard Action Tags.

<jsp: include>

<jsp:forward>

<jsp: useBean>

<jsp:param>

<jsp:setProperty>

<jsp:getProperty>

<jsp:plugin>

<jsp:fallback> Custom Action Tags.

Tag without body. Tag with body.

Tag with body and attributes.

* 1. **JSTL**
     1. Core tags
     2. Formatting tags
     3. Functional tags
     4. Xml tags
     5. SQL tags

1. **Html to jsp communication.**
2. **Servlet to jsp communication.**
3. **Jsp to Servlet communication.**
4. **Jsp to database communication.**
5. **Jsp to txt file communication.**
6. **Expression Language.**
7. **MVC in jsp**