**8. ResultSet Metadata**

**• Theory:**

1. **What is ResultSetMetaData?:-** ResultSetMetaData is an interface in JDBC that provides metadata about the structure of a ResultSet object. While the ResultSet contains the actual data, ResultSetMetaData gives detailed information about the columns in the result set, such as the number of columns, column names, data types, and more.
2. **Importance of ResultSet Metadata in analyzing the structure of query results:-** ResultSetMetaData in JDBC provides detailed information about the structure of the query results, such as the number of columns, column names, data types, nullability, and display size. It helps in dynamically analyzing and processing the results without hardcoding column names or types.
3. **Methods in ResultSetMetaData (getColumnCount, getColumnName, getColumnType):-**
4. **getColumnCount()**

**Eg:-** int columnCount = rsmd.getColumnCount(); System.out.println("Number of columns: " + columnCount);

1. **getColumnName(int column)**

**Eg**:- String columnName = rsmd.getColumnName(1); System.out.println("Column 1 name: " + columnName);

1. **getColumnType(int column)**

**Eg:-** int columnType = rsmd.getColumnType(1); System.out.println("Column 1 type: " + columnType);