Parameterized Queries

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Parameterized Queries

- A query may accept parameters.
- To execute parameterized queries, `PreparedStatement` interface is used.

Parameterized Queries

- Queries created using `PreparedStatement` are compiled once, hence are called as precompiled queries.

Parameterized Queries

- E.g.

```
String sqlQuery =
"select … where deptno in (?, ?)";
    PreparedStatement      pstmt      =
conn.prepareStatement(sqlQuery);
```

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DML Queries

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DML Queries

- To execute `SELECT` queries, `executeQuery()` method is used whereas to execute DML queries, `executeUpdate()` method is used.

Transaction Management

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Transaction Management

- Transaction Management is a very important activity in an application development.
- Transaction is a set of operations that must execute in a single unit.

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Transaction Management

- Updates made from Java application to database are committed by default.

- Once, changes are committed, cannot be rolled back.

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Transaction Management

- To manage the transactions, auto-commit must be disabled.
- This is done by using `setAutoCommit(false)` on the `Connection` object.

Transaction Management

- Once auto-commit is disabled, it is possible to commit or rollback the transactions by using `commit()` or `rollback()` methods respectively.

Lets Summarize

- What is JDBC

- Why JDBC

- JDBC Drivers

- JDBC Core API

- Executing Simple Queries

- Executing Parameterized Queries

- Transaction Management

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