

# JDBC

## Resource Leaks

# Database Resources

- database resources are expensive and are easily multiplied
  - e.g. imagine that every time we fetch something from the DB we open the connection and never close it
- for that reason it's important to close the resources after operation is done
- when closing the resources order is important:
  1. ResultSet, e.g. `rs.close()`
  2. PreparedStatement or CallableStatement, e.g. `stmt.close()`
  3. Connection, e.g. `conn.close()`

# Using try-with-resources

- recommended way of work is using try-with-resources
  - in this way, all resources will be closed automatically after we are done
- but the order is still important
  - try-with-resources closes the resources **in the reversed order** from which they are initialized

```
try (Connection conn = DriverManager.getConnection(url);  
    PreparedStatement ps = conn.prepareStatement(query);  
    ResultSet rs = ps.executeQuery()) { ...
```

last one to be closed

second one to be closed

first one to be closed