JDBC, PHP
JDBC

- Java Database Connectivity.
- API for connecting to SQL from java.
- Some Online Resources
  - Tutorial: [http://infolab.stanford.edu/~ullman/fcdb/oracle/or-jdbc.html](http://infolab.stanford.edu/~ullman/fcdb/oracle/or-jdbc.html)
  - API Guide: [http://infolab.stanford.edu/~ullman/fcdb/oracle/or-jdbc.html](http://infolab.stanford.edu/~ullman/fcdb/oracle/or-jdbc.html)
- JDBC for MYSQL
Load Jdbc Driver in java:
Import java.sql.*package

Class.forName("com.mysql.jdbc.Driver");
Connecting to MYSQL database

String url="jdbc:mysql://dijkstra.ug.bcc.bilkent.edu.tr/username";
Connection con = null;
try{
    con =
    DriverManager.getConnection(url,"username","pass");
} catch (SQLException except ){
    System.out.println ( except.getMessage() );
}
Creating Statements

Statement stmt = con.createStatement();
Creating Tables using the Statement created

Drop the table if it exist before creating not to encounter any problem during subsequent testing

```java
stmt.executeUpdate("DROP TABLE IF EXISTS employee");
stmt.executeUpdate("CREATE TABLE employee" + 
      "(eid CHAR(12) , ename VARCHAR(50)" + 
      "PRIMARY KEY(eid) )ENGINE=innodb;");
```

Don’t forget to set the type to innodb to enable foreign keys.
Executing Select Query and retrieving the tuples

Resultset rs = stmt.executeQuery("SELECT * FROM student");

Traverse the result set like an iterator.
PHP

- Hypertext Preprocessor (PHP).
- Server-Side Scripting Language for web-development
- Can be embedded into HTML.
What to do in your Homework?

Part 1: Connecting to the database with Java
- Load JDBC driver for MYSQL.
- Connect to your MYSQL DB in dijkstra machine with this driver and create tables given in the assignment.
- See Assignment for Details.
What to do in your Homework?

Part 2: A Simple Web Based Application using PHP

- Use your database created in Part1.
- See Assignment for details.
- You can use a PHP Editor (Adobe Dreamweaver) or a text editor to prepare your PHP scripts.
What to do in your Homework?

- You can test your PHP scripts locally or globally.
  - Locally:
    - WAMP server includes both PHP and MySQL.
    - The php scripts on your computer can be tested from your `localhost` using the `mysql` database on your computer or on `dijkstra`.
  - Globally:
    - Put your php scripts into your `public_html` directory and test via your browser by typing `http://dijkstra.ug.bcc.bilkent.edu.tr/user_name/php_page.php`

- Before the submission make sure that your tables are in your `mysql` database on `dijkstra` server.