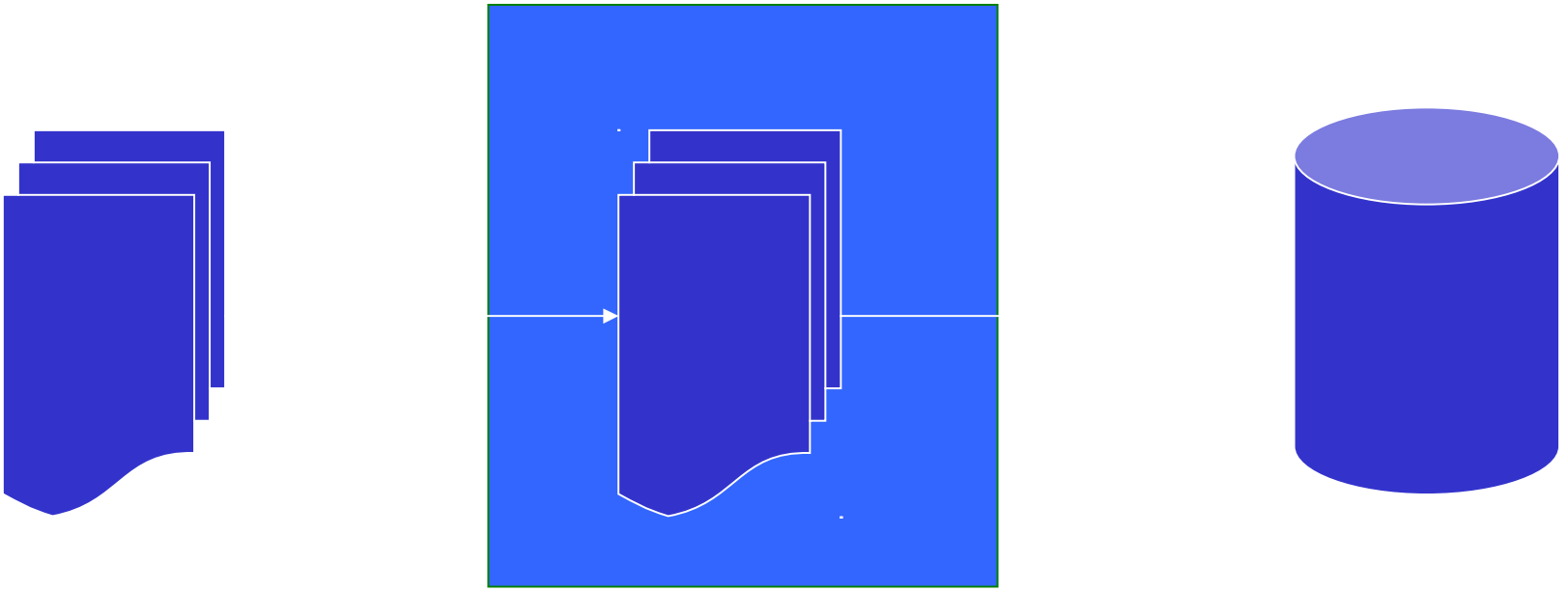
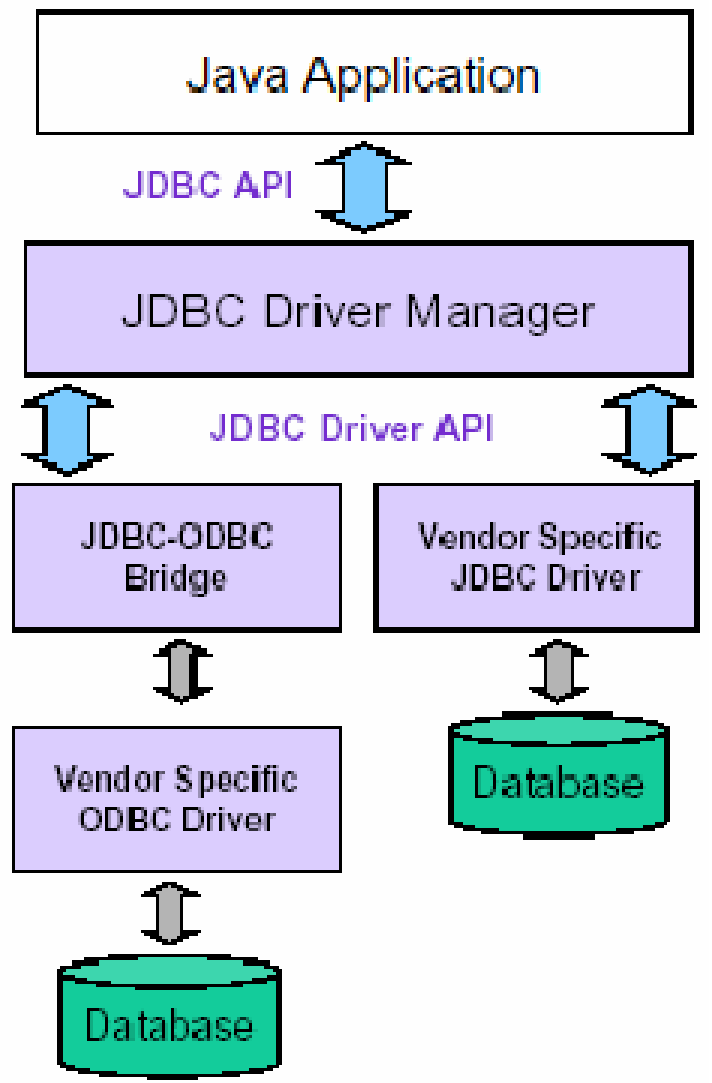
JDBC
Java **D**ata **B**ase **C**onnectivity

http://docs.oracle.com/javase/1.5.0/docs/guide/jdbc/getstart/GettingStartedTOC.fm.html

JDBC is an API that let you accss virtually any tabular data source from the Java programming language.

JDBC Data Source Architecture




Java Application
JDBC API
JDBC Driver Manager
JDBC Driver API
JDBC-ODBC Bridge
Vendor Specific JDBC Driver
Vendor Specific ODBC Driver
Database
Database

Basic steps to use a db in Java

1)Establish a connection

2)Create JDBC Statements

3)Execute SQL Statements

4)Get ResultSet

5)Close connections

```
import java.sql.*;
//Load the vendor specific driver
Class.forName("oracle.jdbc.driver.OracleDriver");
```

http://www.xyzws.com/javafaq/what-does-classforname-method-do/17

Dynamically loads a driver class, for Oracle database

```
//Make the connection
Connection con =
DriverManager.getConnection( "jdbc:oracle:thin:@oracle-prod:1521:OPROD", username, passwd);
```

What do you think this statement does?

Establishes connection to database by obtaining a *Connection* object

Statement stmt = con.createStatement() ;

Creates a Statement object for sending SQL statements to the database

```
String createLehigh = "Create table Lehigh " +
    "(SSN Integer not null, Name VARCHAR(32), "
+ "Marks Integer)";
    stmt.executeUpdate(createLehigh);
    //What does this statement do?

String insertLehigh = "Insert into Lehigh values“
+  "(123456789,abc,100)";
    stmt.executeUpdate(insertLehigh);
```

```
String queryLehigh = "select * from Lehigh";

ResultSet rs =
Stmt.executeQuery(queryLehigh);
//What does this statement do?

while (rs.next()) {
    int ssn = rs.getInt("SSN");
    String name = rs.getString("NAME");
    int marks = rs.getInt("MARKS");
}
```

```
stmt.close();
con.close();
```