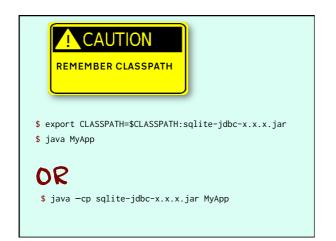# JDBC

```
Class.forName("oracle.jdbc.OracleDriver");

Class.forName("com.mysql.jdbc.Driver");

Class.forName("org.postgresql.Driver");

Class.forName("org.sqlite.JDBC");

Class.forName("org.apache.derby.jdbc.EmbeddedDriver");
```
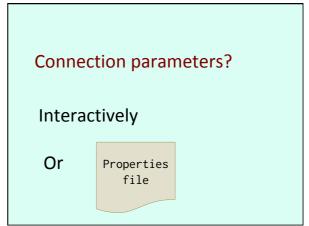
```
con = DriverManager.getConnection(url, info);
        "jdbc:oracle:thin:@hostname:port:dbname"
        "jdbc:postgresql://hostname:port/dbname"
         user    password
con = DriverManager.getConnection(url,
                                  username,
                                  password);
        "jdbc:mysql://hostname:port/dbname"

con = DriverManager.getConnection(url);
        "jdbc:sqlite:filename"
```

Java/JDBC
```
  private String     dataMinDate = "0000-00-00";
  private String     minDate = "0000-00-00";
  private String     maxDate = "0000-00-00";
  private Connection  con = null;

  private void init(String dbPath) {
    try {
      Class.forName("org.sqlite.JDBC");
    } catch (Exception e) {
      System.err.println("Cannot find the driver.");
      System.exit(1);
    }
    try {
      con = DriverManager.getConnection("jdbc:sqlite:"
                                        + dbPath);
      con.setAutoCommit(false);
```

Java/JDBC

```java
  private String    dataMinDate = "0000-00-00";
  private String    minDate = "0000-00-00";
  private String    maxDate = "0000-00-00";
  private Connection  con = null;

  private void init(String dbPath) {
    try {
      Class.forName("org.sqlite.JDBC");
    } catch (Exception e) {
      System.err.println("Cannot find the driver.");
      System.exit(1);
    }
    try {
      con = DriverManager.getConnection("jdbc:sqlite:"
                                        + dbPath);
      con.setAutoCommit(false);
```

Java/JDBC

```java
      con = DriverManager.getConnection("jdbc:sqlite:"
                                        + dbPath);
      con.setAutoCommit(false);
      // Should look for min/max dates
      PreparedStatement stmt;
      ResultSet          rs;
      stmt = con.prepareStatement(
        "select substr(min(UTC_date),1,10),"
      + " substr(max(UTC_date),1,10),"
      + "substr(datetime(max(UTC_date), '-7 days'),1,10)"
      + " from quakes");
      rs = stmt.executeQuery();
```

Java/JDBC

```java
      con = DriverManager.getConnection("jdbc:sqlite:"
                                        + dbPath);
      con.setAutoCommit(false);
      // Should look for min/max dates
      PreparedStatement stmt;
      ResultSet          rs;
      stmt = con.prepareStatement(
        "select substr(min(UTC_date),1,10),"
      + " substr(max(UTC_date),1,10),"
      + "substr(datetime(max(UTC_date), '-7 days'),1,10)"
      + " from quakes");;
      rs = stmt.executeQuery();
```

Java/JDBC

```java
      rs = stmt.executeQuery();
      if (rs.next()) {
        dataMinDate = rs.getString(1);
        maxDate = rs.getString(2);
        minDate = rs.getString(3);
      }
      rs.close();
    } catch (Exception e) {
      System.err.println(e.getMessage());
      System.exit(1);
    }
  }
```

⚠ CAUTION

REMEMBER CLASSPATH

```
$ export CLASSPATH=$CLASSPATH:sqlite-jdbc-x.x.x.jar
$ java MyApp
```

OR

```
$ java –cp sqlite-jdbc-x.x.x.jar MyApp
```

Connection parameters?

Interactively

Or   Properties file

Useful Query for the Project

All quakes between two dates and of magnitude equal to or greater than a parameter in a given region

---

Useful Query for the Project

```
select id, substr(UTC_date,1,19),
       latitude,longitude,depth,
       magnitude,region
from quakes
where UTC_date >= ?
  and UTC_date < date(?, '+1 day')
  and magnitude >= ?
  and (region = ? or ? = 'WorldWide')
order by UTC_date desc
```

Useful Query for the Project

```
select id, substr(UTC_date,1,19),
       latitude,longitude,depth,
       magnitude,region
from quakes
where UTC_date >= ?
  and UTC_date < date(?, '+1 day')
  and magnitude >= ?
  and (? = 'XX'  -- Everything
      or area_id in
         (select id from plate_areas
          where plate1=? or plate2=?))
order by UTC_date desc
```