Programming Tutorial [Advanced]



SQL Injection



LulzSec Hacking team today Release the Sony's Japanese website Database dump via their Twitter Account. This is the 9th Attack on Sony. This attack is also using SQL Injection method.

The vulnerable Links are:

SQLi #1: http://www.sonymusic.co.jp/bv/cro-magnons/track.php?item=7419

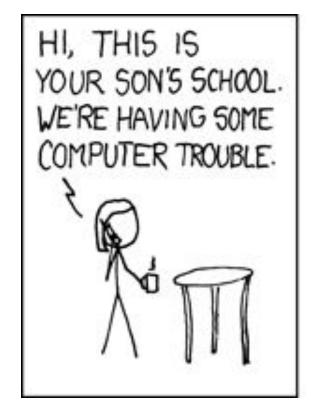
SQLi #2: http://www.sonymusic.co.jp/bv/kadomatsu/item.php?id=30&item=4490

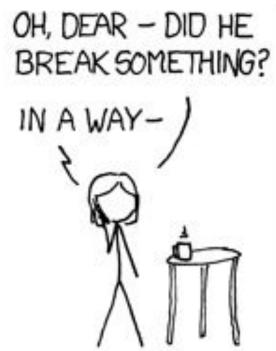
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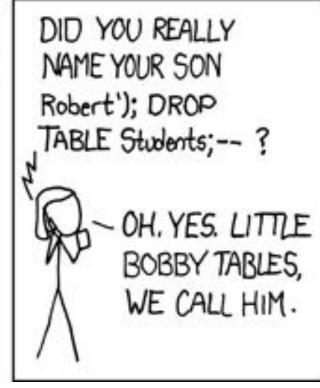
Image Source:

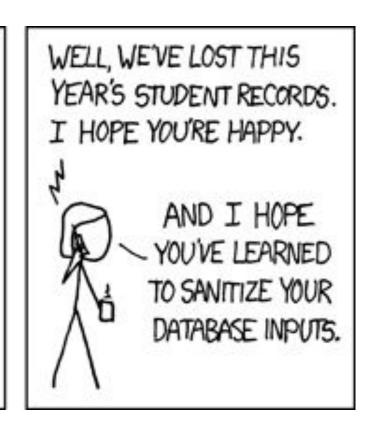
https://thehackernews.com/2011/05/lulzsec-leak-sonys-japanese-websites.html

SQL Injection









Statement

```
try{
   Class.forName(org.sqlite.JDBC);
   Connection conn = DriverManager.getConnection(jdbc:sqlite:test.db);
   Statement stat = conn.createStatement();
   stat.executeUpdate("CREATE TABLE people (name, occupation);");
}
catch(SQLException e) {
   e.printStackTrace();
}
catch(ClassNotFoundException e) {
   e.printStackTrace();
}
```

PreparedStatement

```
try{
  Class.forName(org.sqlite.JDBC);
  Connection conn = DriverManager.getConnection(jdbc:sqlite:test.db);
  conn.setAutoCommit(false);
  PreparedStatement prep = conn.prepareStatement (
     "INSERT INTO people VALUES (?,?);");
  prep.setString(1, "Turing");
  prep.setString(2, "computers");
  prep.addBatch();
  prep.setString(1, "Einstein");
  prep.setString(2, "physics");
  prep.addBatch();
  prep.executeBatch();
  conn.commit();
catch(SQLException e) {
  e.printStackTrace();
catch(ClassNotFoundException e) {
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  e.printStackTrace();
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  e.printStackTrace();
```

ResultSet

```
try{
  Class.forName(org.sqlite.JDBC);
  Connection conn = DriverManager.getConnection(jdbc:sqlite:test.db);
  Statement stat = conn.createStatement();
  ResultSet rs = stat.executeQuery("SELECT * FROM people;");
  while(rs.next()){
     System.out.println("name = " + rs.getString("name"));
     System.out.println("job = " + rs.getString("occupation"));
  rs.close();
  conn.close();
catch(SQLException e) {
  e.printStackTrace();
catch(ClassNotFoundException e) {
  e.printStackTrace();
```

ResultSet

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  while(rs.next()){
     System.out.println("name = " + rs.getString("name"));
     System.out.println("job = " + rs.getString("occupation"));
  rs.close();
  conn.close();
catch(SQLException e) {
  e.printStackTrace();
catch(ClassNotFoundException e) {
  e.printStackTrace();
```

Hints

Execute the following Statement every time you start your code (Not applicable in real life):

```
DROP TABLE IF EXISTS <YOUR_TABLE_NAME>
```

Download the latest version of sqlite-jdbc here:

https://bitbucket.org/xerial/sqlite-jdbc/downloads/

Compile and run your code as follows:

```
javac -cp /path/to/sqlite.jar FileName.java
java -cp .:/path/to/sqlite.jar ClassName

(Note: For Windows use ';' instead of ':')
```

Databases

In this course we will use Github Classroom

- 1. Get a Github Account if you don't have one
- 2. Go to: https://classroom.github.com/a/JRpxxXpn (or scan the QR Code with your phone)
- 3. Authorize Github and accept the assignment
- 4. Click on the repository

