

---

**COMPUTER SUBJECT:** BASIC NETWORK CONCEPTS

**TYPE:** GROUP WORK EXERCISE/DISCUSSION

**IDENTIFICATION:** SQLInjection/MC

**COPYRIGHT:** *Michael Claudius & Homayoon Fayez*

**LEVEL:** INTERMEDIATE

**DURATION:** 2 hours - 1 month

**SIZE:** 50 lines!!

**OBJECTIVE:** Injection of login pages

**REQUIREMENTS:** **Network Security Essentials**

**COMMANDS:**

---

## IDENTIFICATION: SQL-Injection/MICL&MOFA

### Prolog

The IT-Security company, SmartICT is looking for smart guys/girls with hacking skills, The salary is really high but you have to prove your skills in practice. The owner, Mohammed Fayez, ([mofa@securemail.com](mailto:mofa@securemail.com)) currently busy investigating a serious intrusion in DeBeers Ltd and his young assistant, Michael Claudi, ([micl@securemail.com](mailto:micl@securemail.com)) have setup this assignment as a test.

### Facebook information

Looking at Mr. Fayez Facebook profile you discover that he has an agricultural farm here in Denmark growing various traditional vegetables like carrots, peas, potatoes, tomatoes and so on. He is very found of these vegetables especially cucumber.

### The Mission

You are to make a simulation of an attack on home page with a PHP-login to a backend system which is based on DB with a table with user information. The DB-server is unknown but it is probably a relational DB based on SQL.

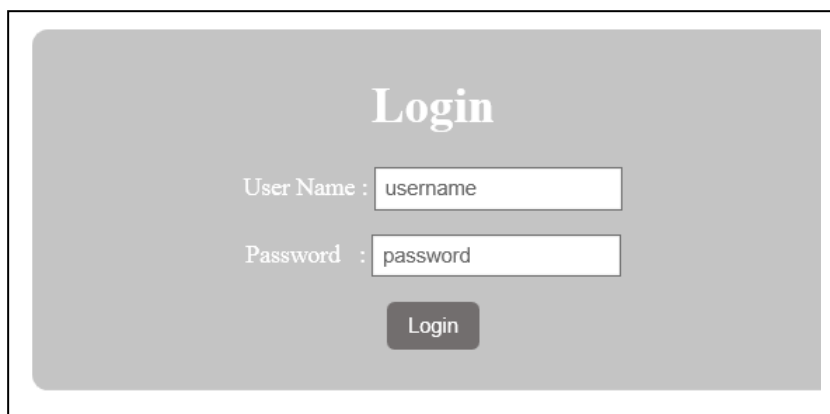
### Purpose

The purpose is to find out as much as possible about the information hidden behind the link:

<https://smartict.dk/sites/zealand/sqlinjection/login.php>

<http://www.smartict.dk/smartict/login.php> (OUTDATED !Q)

where there is just one login page:



The image shows a login form with a grey background. At the top, the word "Login" is written in a large, white, serif font. Below it, there are two input fields. The first is labeled "User Name :" and contains the text "username". The second is labeled "Password :" and contains the text "password". Below the password field is a dark grey button with the word "Login" in white text.

### Useful links

[http://www.w3schools.com/sql/sql\\_injection.asp](http://www.w3schools.com/sql/sql_injection.asp);

General description

<http://www.unixwiz.net/techtips/sql-injection.html>; many tricks here

Tip: If you want to use ideas then copy and paste the examples into a Notepad document

### Assignment 1: DB-table information

- a. Prove that SQL-sentence is used to verify the user
- b. Find the name of the DB server

- 
- c. Find 3 column attributes
  - d. Find the name of the table
  - e. Prove that there are more than 3 column attributes
  - f. Find all column attributes
  - g. Verify the structure of the SQL-sentence behind the stage

---

### Assignment 2: DB-table intrusion

- a. Show how to login to the system without knowing anything...
- b. Guess the administrator username. Can you prove this as well?
- c. Guess the administrator password  
(Normally not possible/easy requires password cracking BUT maybe tracking can used)
- d. Try to insert a fake user in the system.

### Assignment 3 The Net

Can you find some SQL-injection tools for hacking this site?

### Assignment 4 The Net

Investigate some home pages you normally visit and test their vulnerability for SQL-Injection. This is of course an illegal act and I have no responsibility for your actions. Maybe its better to wait next week where we also introduce hack.me..