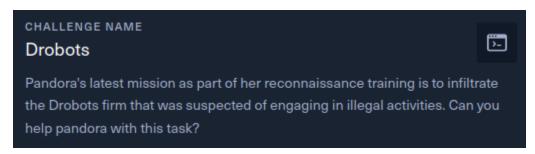
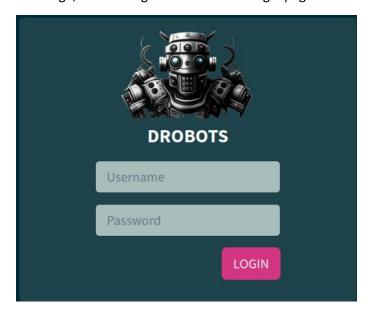
Challenge 1 - Drobots

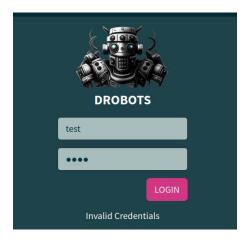
Very easy – Web Category



In this challenge we are presented with an IP address and a port number. This challenge being a web challenge, it is hosting a website with a login page.



The first and easiest thing to check for is an SQLi. In order to do this, we first need to check what the normal error message of incorrect credentials is. So, I used test: test to try it out.



Now that we know what the normal output is we can try and close a bracket that might be there and create the rest of the SQL query. The injection we use is ...

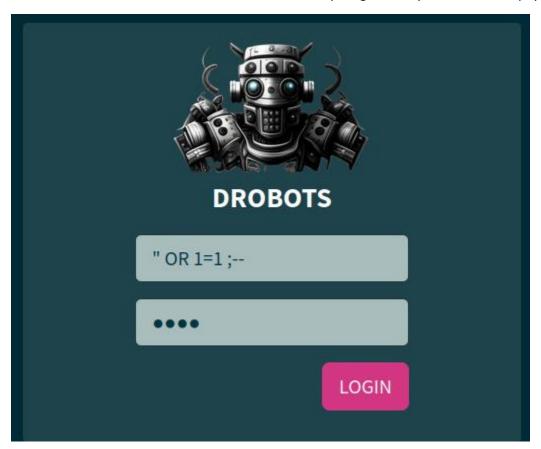
" OR 1=1 ;--

The " is to close the bracket making it equal false

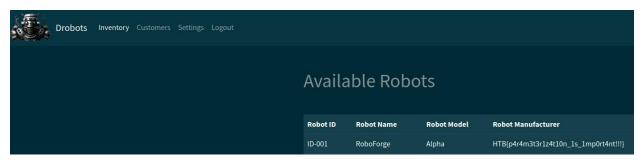
The OR operator is to say, "false or.."

The 1=1 is always true making the statement, so fat is select anything that is false or true.

The ;-- is to finish the statement and comment out anything that may come after the payload.



Now we can press login and see if it works...



And it does!

The reason why this works is because the code behind handling the login query is not sanitized. Because we cannot see the exact code we cannot tell where exactly this can be resolved, but one easy fix for this would be to not allow any special characters to pass through the username field.

Essentially what this payload is doing is turning the database query to "fetch username and password, then login if they both match" into "just pull all user information".

What was something like...

SELECT * FROM users WHERE username = "<username>" AND password = "<Password>"

Then becomes...

SELECT * FROM users WHERE username = ""(False) OR 1=1(True) ;-- AND Password = "<password>"

Where the section in green is commented out and not parsed by the database.