Hey all, in this blog post today I’m going to solve the **picoCTF “Web Exploitation Login”** vulnerability.

Graphical user interface, text, application

Description automatically generated

When we get this, we can only see the “description” and the link only. This description says somehow want to log in to this webpage. In this form, we haven’t seen any hints. Therefore, first we need to go to this link.

Graphical user interface, application

Description automatically generated

After we click this link, it’s redirected to this kind of login page.

First, I tried an SQL injection attack to log to this login form, but it’s doesn't work.

After tried the SQL injection attack then I’m looking at the source code of this web page. To look at the source code on the web page hit ‘F12’ then go to the ‘Debugger’ tab where I can see the ‘index.js’ JavaScript file.

Graphical user interface, text, application, email

Description automatically generated

By looking at this index.js code we can see code has a function call ‘btoa()’. Now we want to know what this function is. we can understand this method use to creates a ‘Base64-encoded ASCII string from a binary string’. If you want to know about more details this method, I have provided a link for you. ‘https://developer.mozilla.org/en-US/docs/Web/API/btoa’

Now we have a clear understanding of this method, so we need to use this method to a successful our task.

After reading this article previously I mentioned we can see it says this method can decode. So that we need to use ‘atob()’ method. then we can understand when we decode this

‘cGljb0NURns1M3J2M3JfNTNydjNyXzUzcnYzcl81M3J2M3JfNTNydjNyfQ’

value we can generate a flag inside the password. To generate flag, open the ‘Console’ tab in your browser and then type this command.

**‘atob("cGljb0NURns1M3J2M3JfNTNydjNyXzUzcnYzcl81M3J2M3JfNTNydjNyfQ")’**

After it’s generated the flag value.

A screenshot of a computer

Description automatically generated with medium confidence

Then we can submit this flag in the picoCTF and complete our task.

Graphical user interface, application

Description automatically generated

Thank You!!