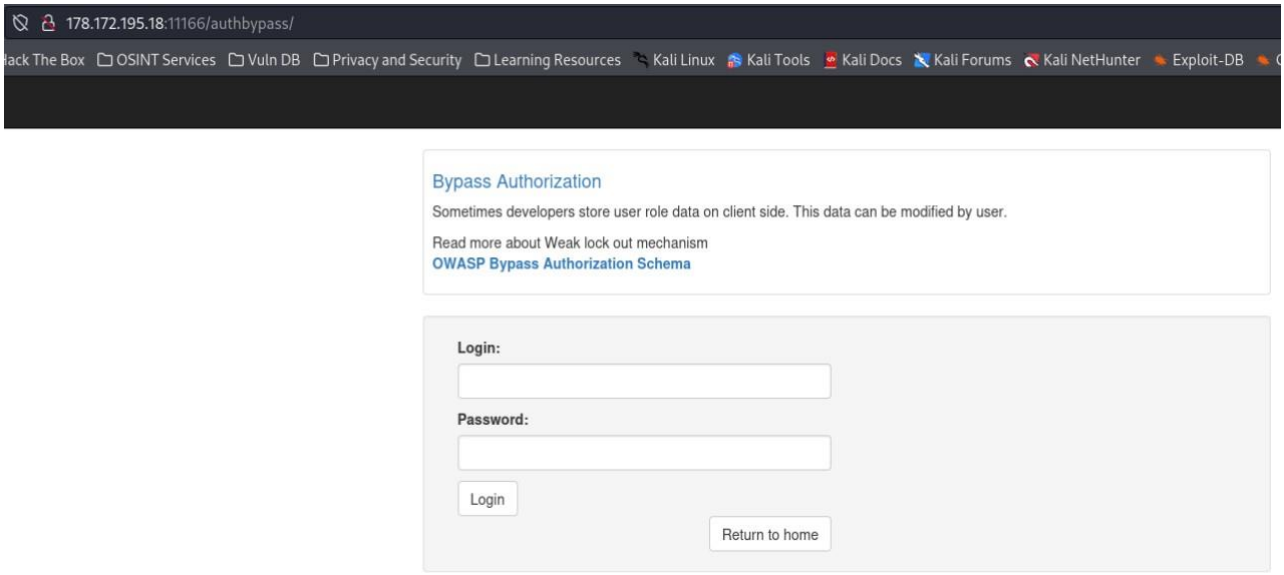
Web Application Security Testing -> **Report for the 20231218 lesson 3**

Content

Authorization bypass

Solution

1. Run the **Authorization Bypass** task.



2. Press the `[F12]` button to open the developer tools.

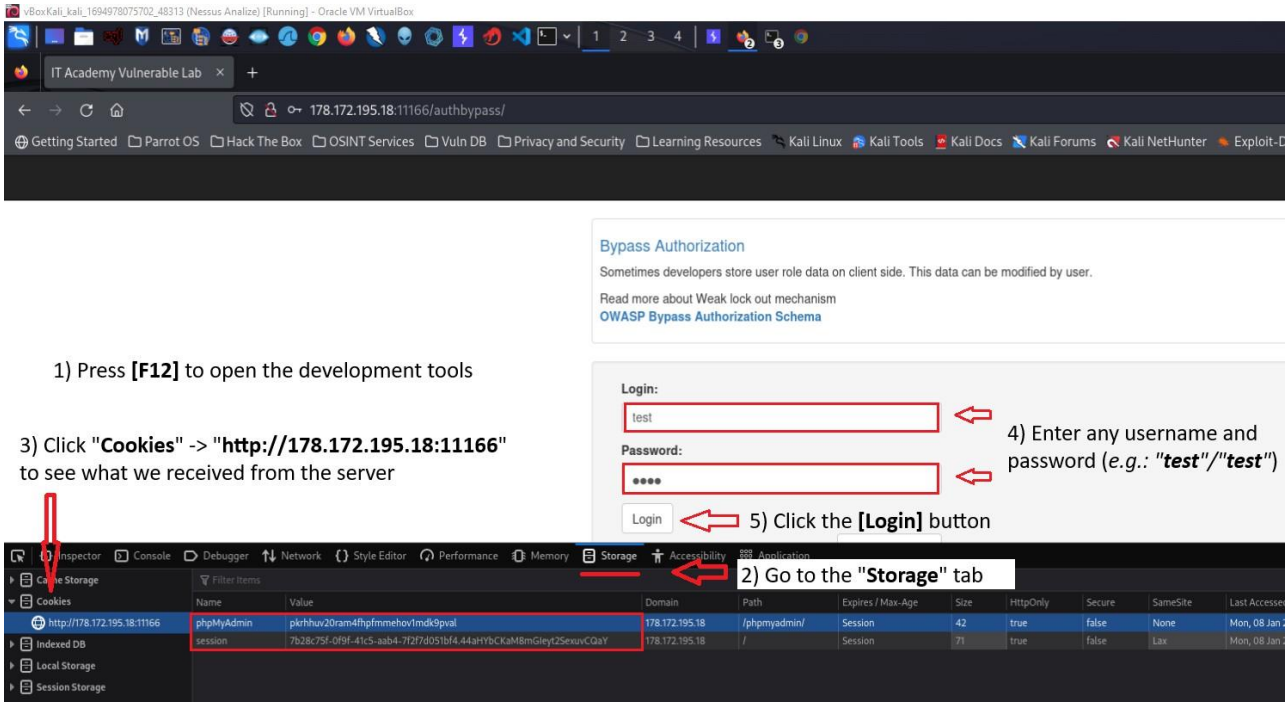
3. Go to the "*Storage*" tab.

4. Click "*Cookies*" -> "*http://178.172.195.18:11166*" to see what we received from the server.

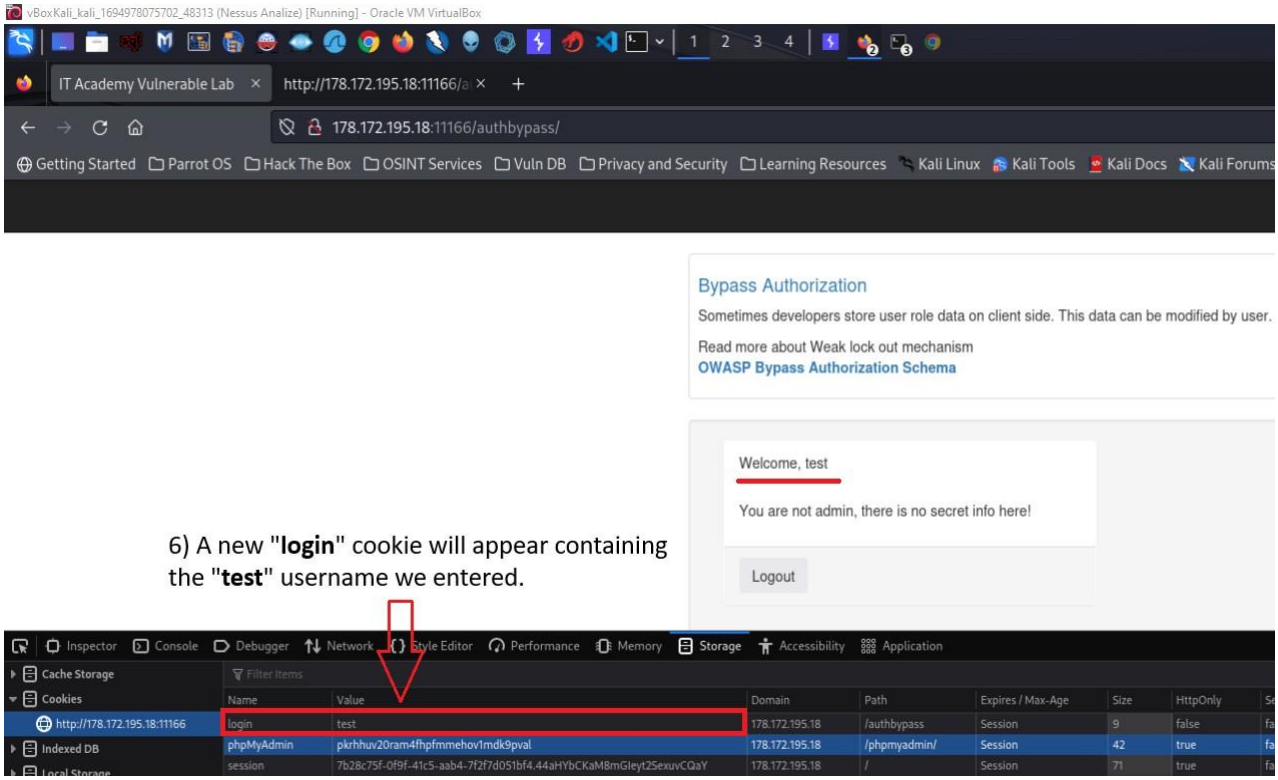
> **NOTE:** We have 2 cookies: "*phpMyAdmin*" and "*session*".

5. Enter any username and password (*e.g.:* `test`/`test`)

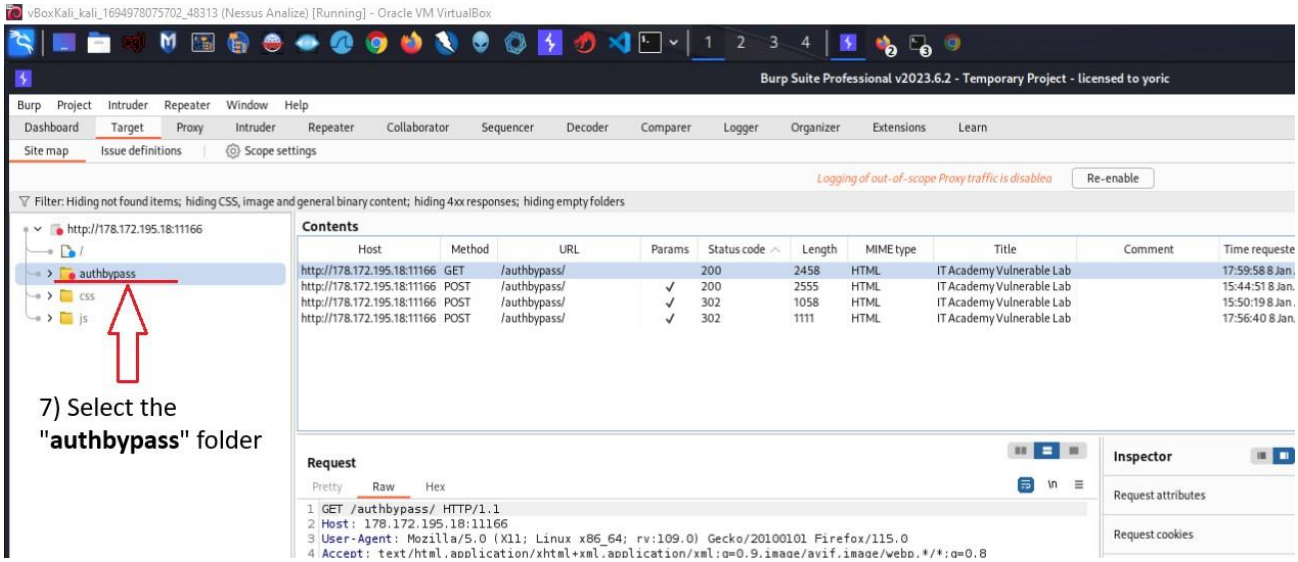
6. Click the `[Login]` button.



7. Once we log in, the *welcome* page appears, and a new "*login*" cookie contains the "*username*" our entered.



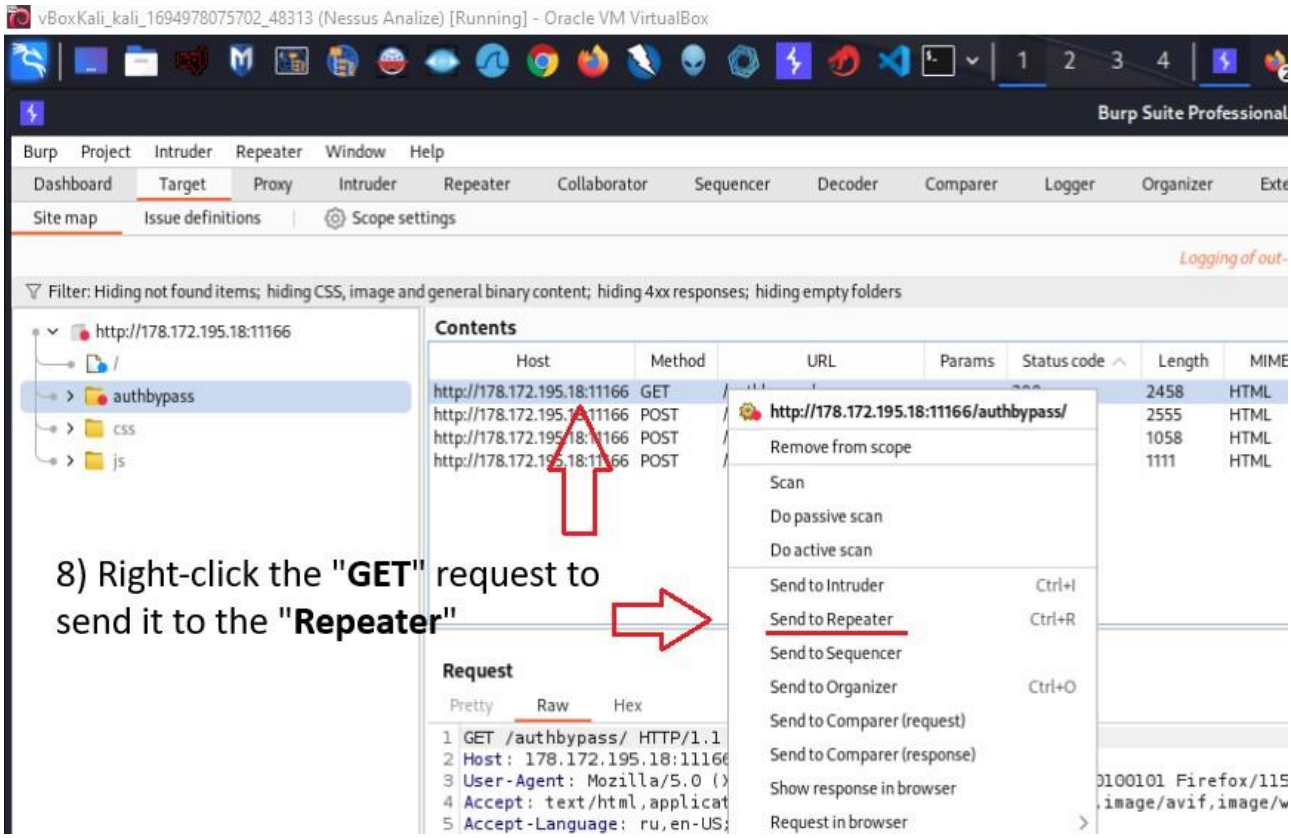
8. Run **Burpsuite** to drill down into events and compare behavior.



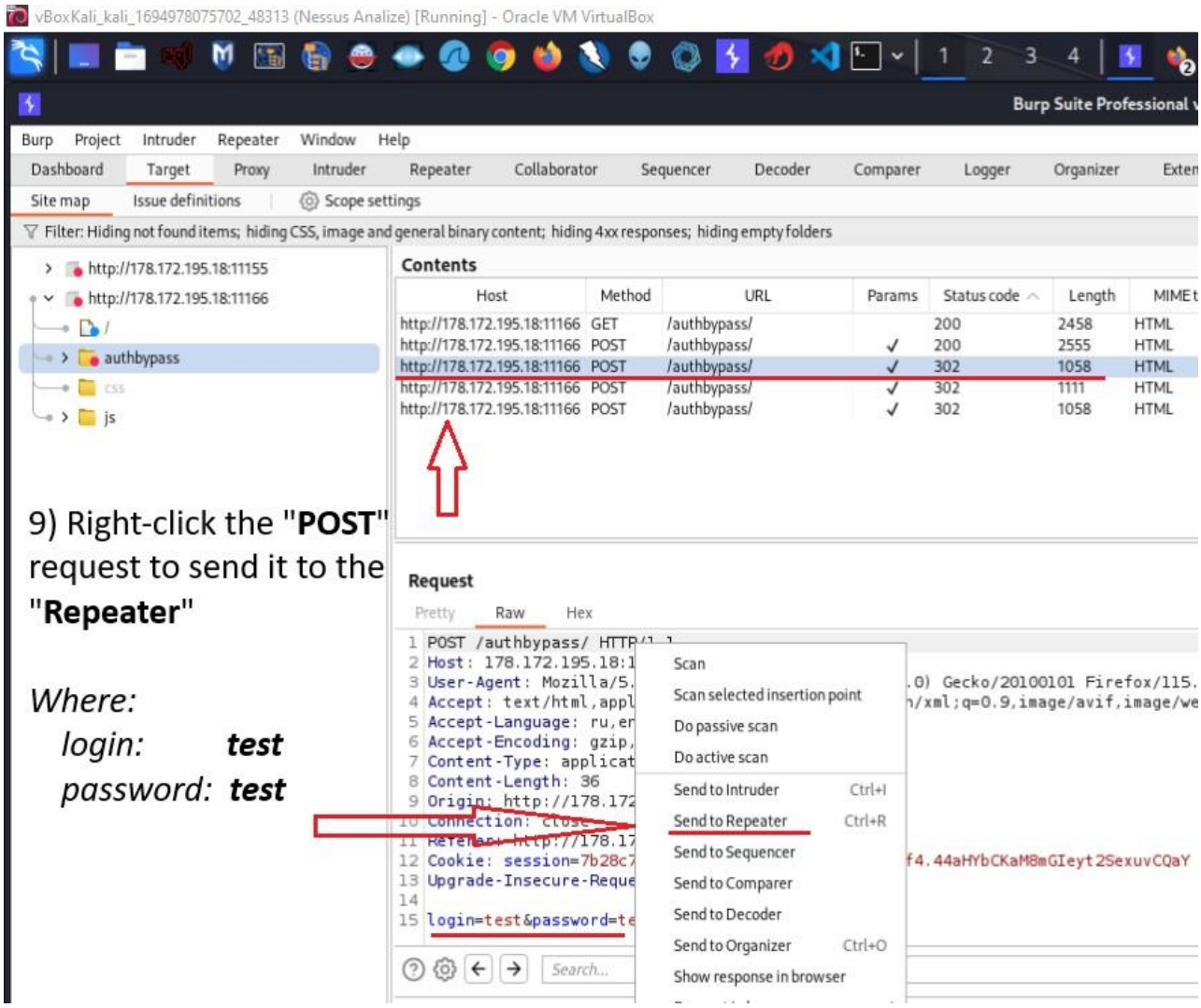
9. Expand the host tab "http://178.172.195.18:11166".

10. Select the "`authbypass`" folder to see the requests.

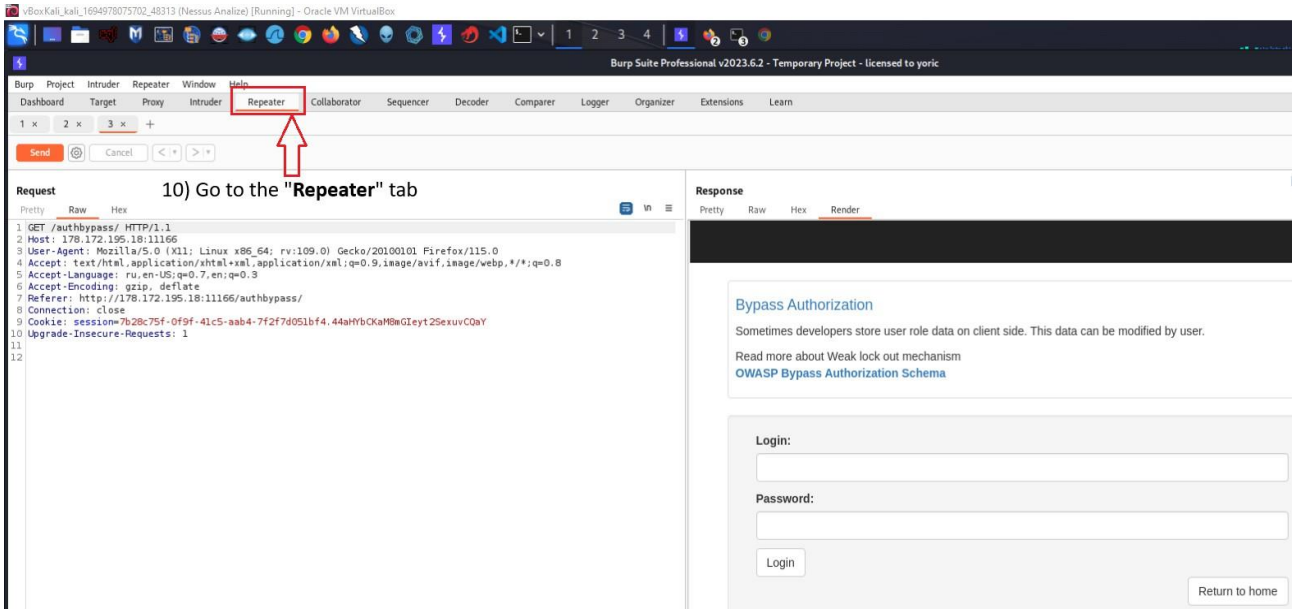
11. In the Content area, right-click the "*GET*" request to send it to the "*Repeater*".



12. Then we do the same for the "*POST*" request, to which we send the login and password (`test`/`test`).



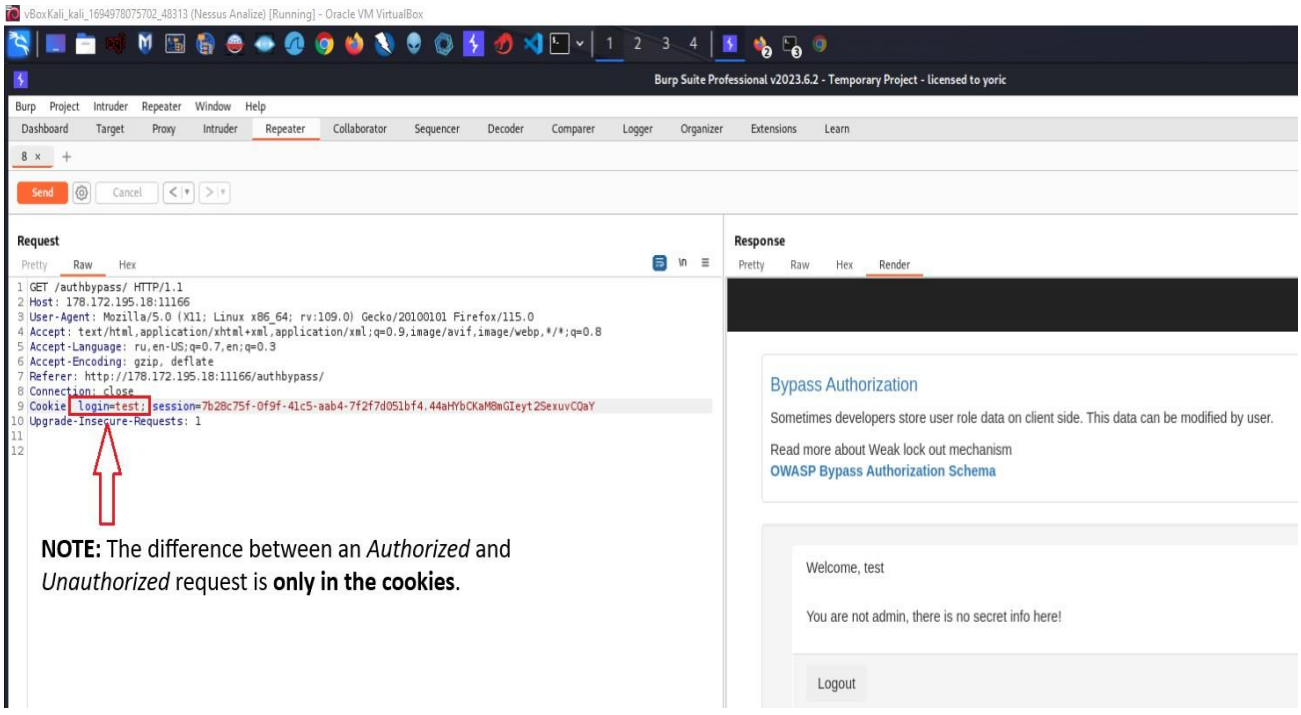
13. Go to the "*Repeater*" tab.



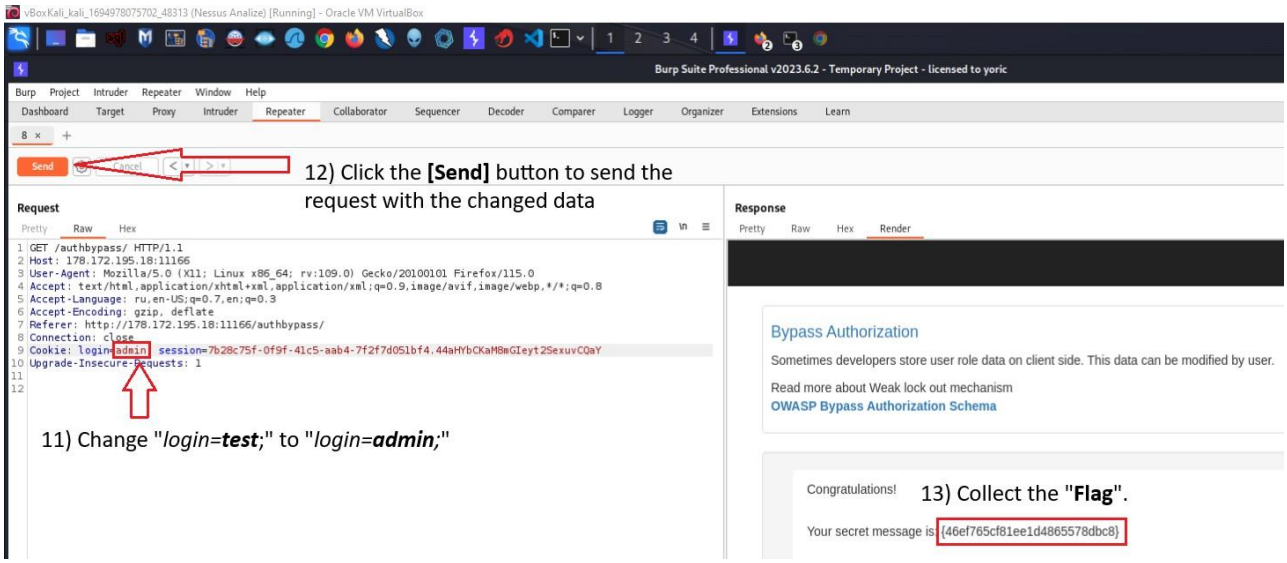
> **NOTE:**
>
> If we compare an "*Authorized*" request with an "*Unauthorized*", we will only find the difference in the cookies.

Upon "*Autorized*" request from the server, we receive a welcome page with the message "**You are not an admin, there is no secret info here!**" and the request contains cookies with a new line "`login=test ;`".

14. Change "`login=test;`" to "`login=admin;`";

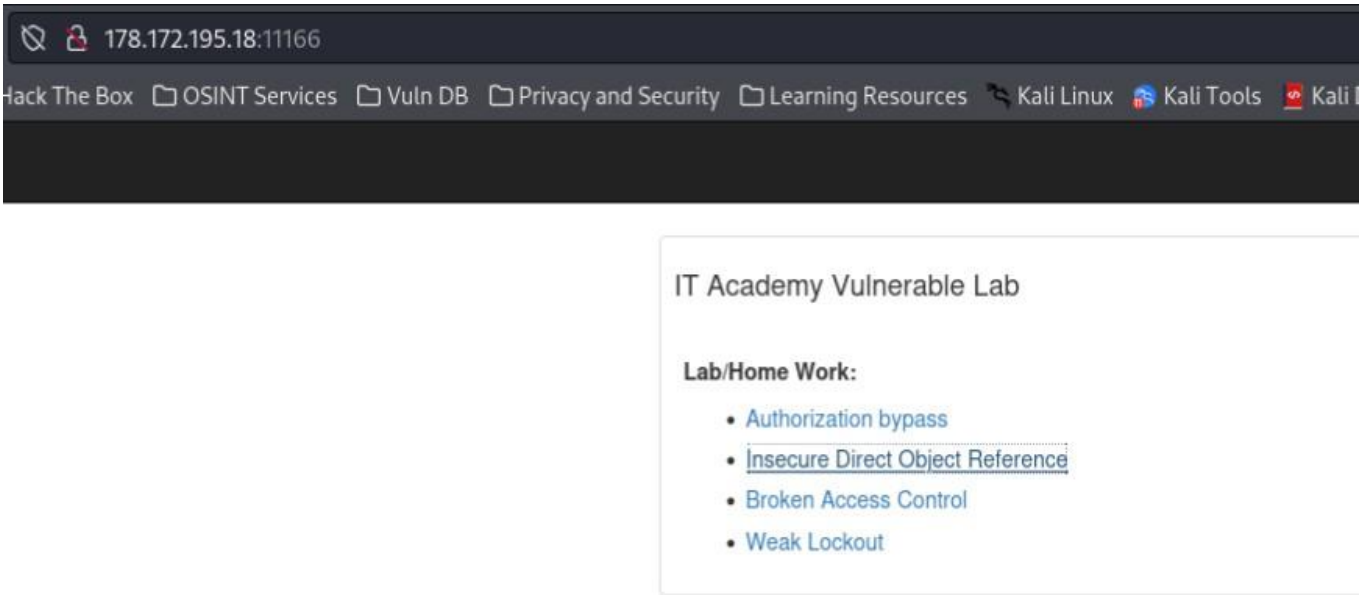


15. Click the `[Send]` button to resend the request with the changed data.



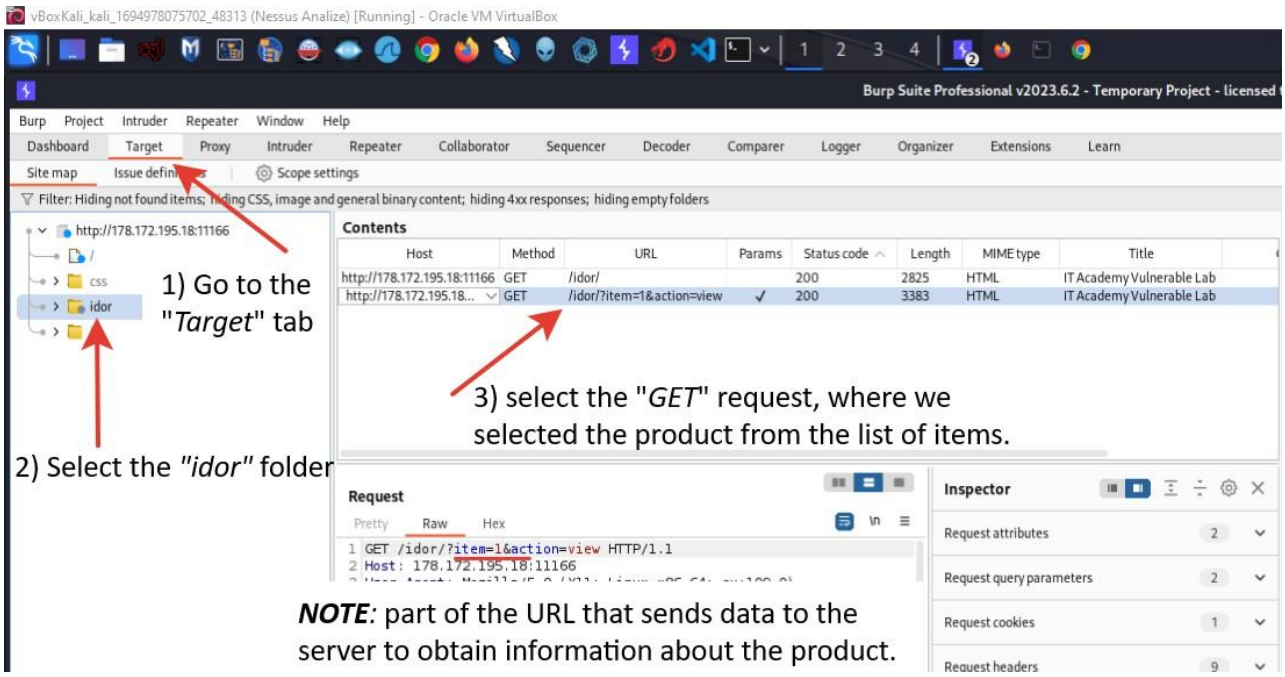
16. The answer has been changed and we see that the new welcome page contains a flag.

Insecure Direct Object Reference



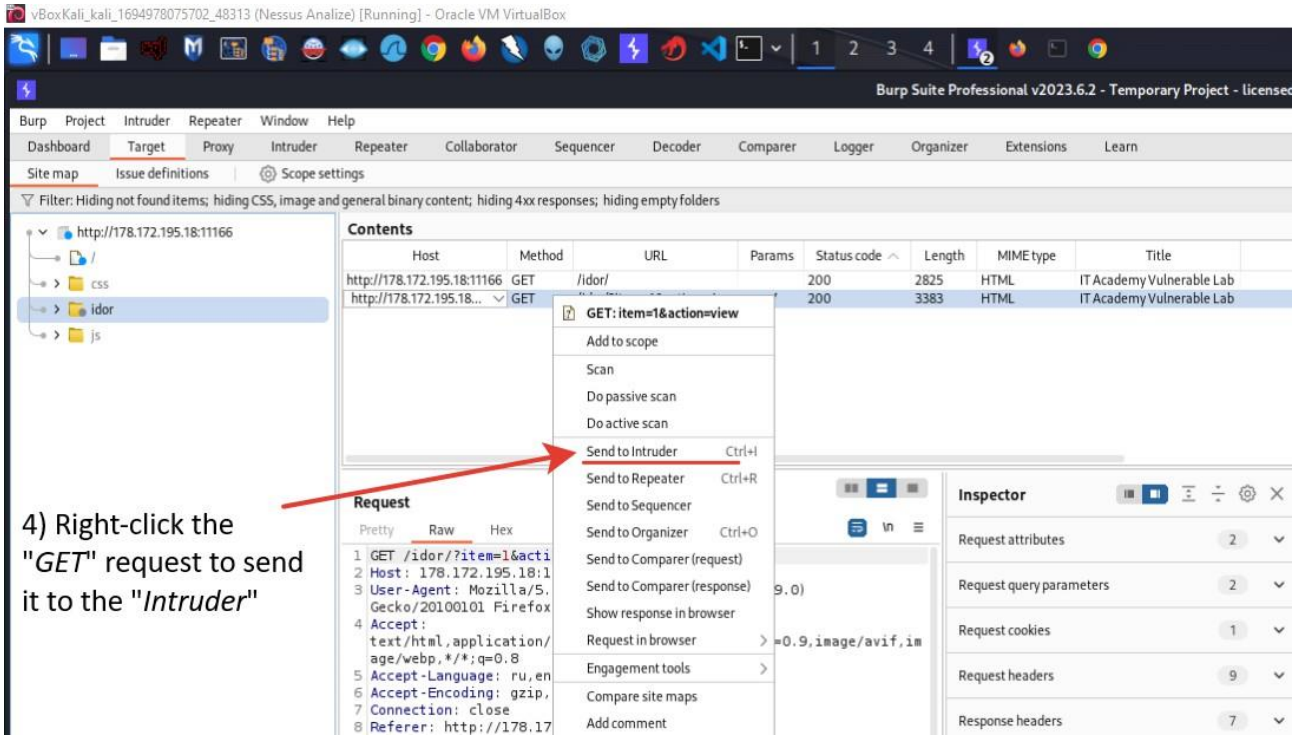
Solution

1. Launch **Burpsuite** to be able to automatically brute values.
2. Go to the "*Target*" tab.
3. Expand the host tab "http://178.172.195.18:11166".
4. Select the "*idor*" folder to see the requests.
5. In the Content area, select the "*GET*" request, where we selected the product from the list of items.



> **NOTE:**
>
> `?item=1&action=view` - part of the URL that sends data to the server to obtain information about the product.

6. Right-click the "*GET*" request to send it to the "*Intruder*".

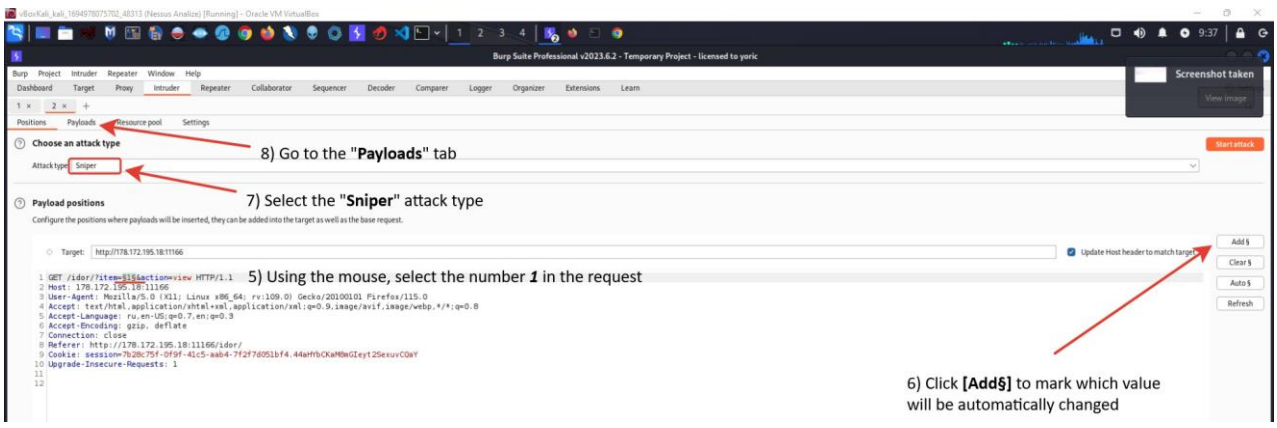


7. Go to the "*Intruder*" tab.

8. Using the mouse, select the number '1' (*depends on your choice in the product list*) in the request

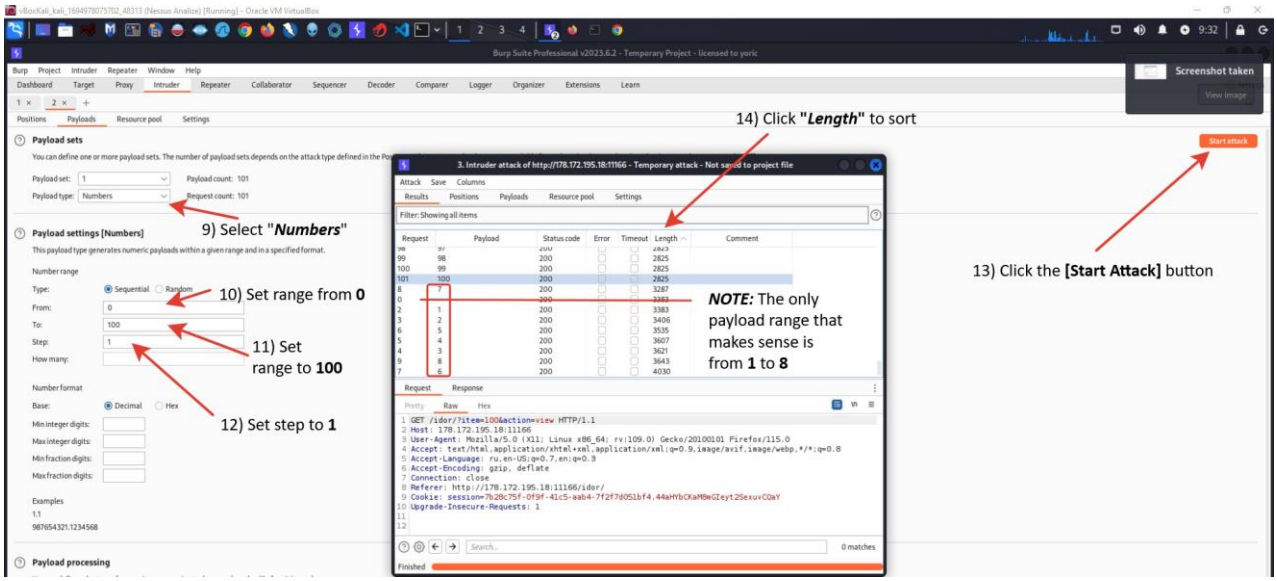
9. Click `[Add§]` to mark which value will be automatically changed.

10. Choose an attack type "*Sniper*"



> **NOTE:**
>
> Since we will only be affecting one value, select the `Sniper` attack type.

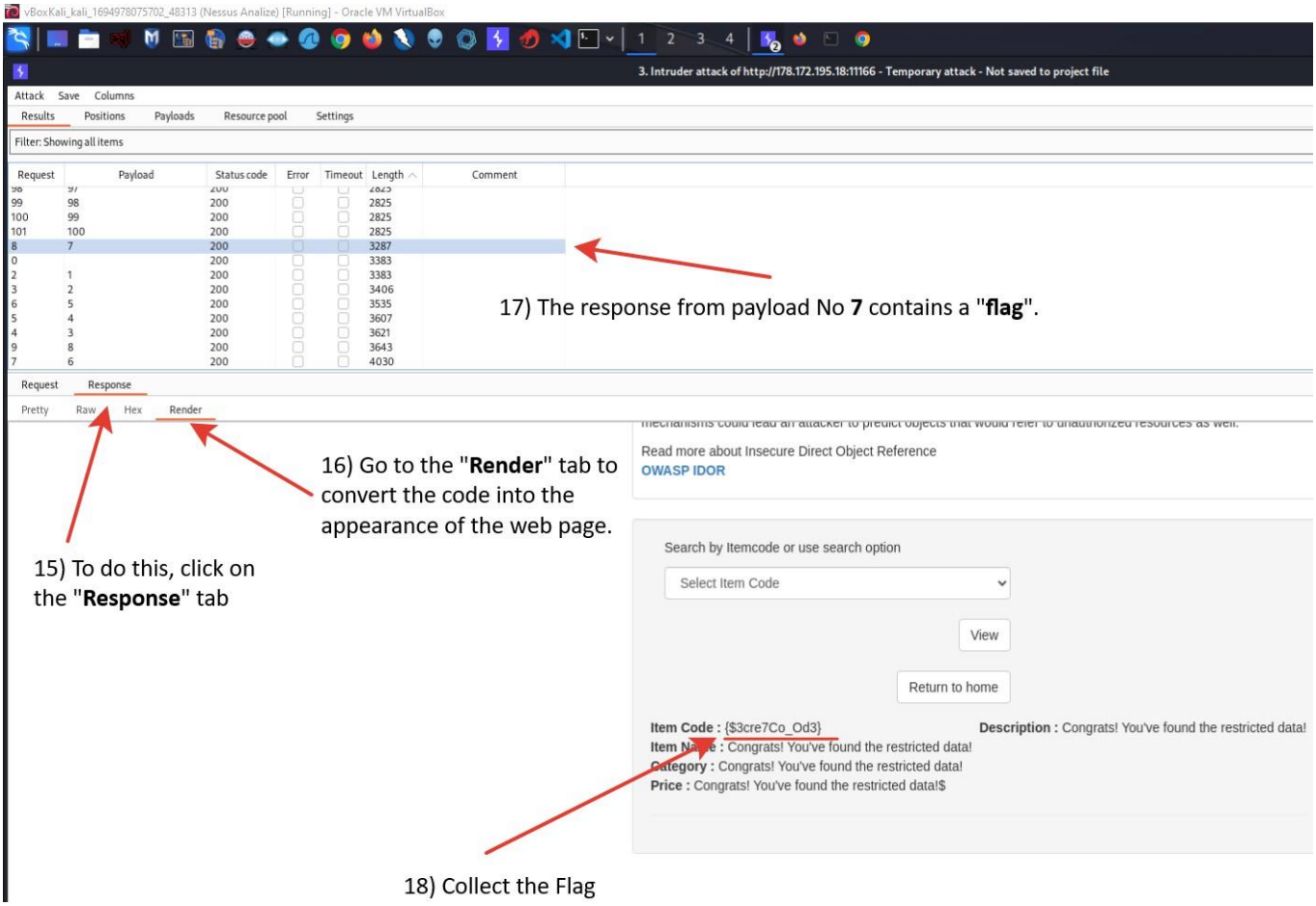
11. Go to the Payloads tab.



12. Select **Payload Type** as “Numbers”.
13. Set the following properties for the "*Number Range*"
    - Type => `Sequential`
    - From => `0`
    - To => `100`
    - Step => `1`
14. Click the `[Start Attack]` button.
15. When the attack is complete, click "*Length*" to sort the length of the response and understand what content the response has.

> **NOTE:**
>
> All responses of the same length tell us that there is no suitable content to view and we can ignore them. The same situation with the first and second request (`item=0` *and* `item=1`).
>
> Now we can see that the only payload range that makes sense is from **1** to **8**. As we remember, there are only *5* items in the item list, but after the attack **we can find 3 more**.
>
> Let's see what they contain.

16. To do this, click on the "*Response*" tab.
17. Go to the "*Render*" tab to convert the code into the appearance of the web page.
18. Then select the payload number from 6 to 8 to view them.
19. The response from payload 7 contains a flag.


3. Intruder attack of http://178.172.195.18:11166 - Temporary attack - Not saved to project file
Attack Save Columns
Results Positions Payloads Resource pool Settings
Filter: Showing all items
Request Payload Status code Error Timeout Length Comment
99 98 200 2825
100 99 200 2825
101 100 200 2825
8 7 200 3287
0 200 3383
2 1 200 3383
3 2 200 3406
6 5 200 3535
5 4 200 3607
4 3 200 3621
9 8 200 3643
7 6 200 4030
17) The response from payload No 7 contains a "flag".
Request Response
Pretty Raw Hex Render
16) Go to the "Render" tab to convert the code into the appearance of the web page.
15) To do this, click on the "Response" tab
Read more about Insecure Direct Object Reference
OWASP IDOR
Search by Itemcode or use search option
Select Item Code
View
Return to home
Item Code : {$3cre7Co_Od3}
Description : Congrats! You've found the restricted data!
Item Name : Congrats! You've found the restricted data!
Category : Congrats! You've found the restricted data!
Price : Congrats! You've found the restricted data!$
18) Collect the Flag

Broken Access Control *<- I missed the access time*

> **NOTE:** I missed the time to have an access and solve this task.

Weak Lockout *<- I missed the access time*

> **NOTE:** I missed the time to have an access and solve this task.