1. Create your own unique database table

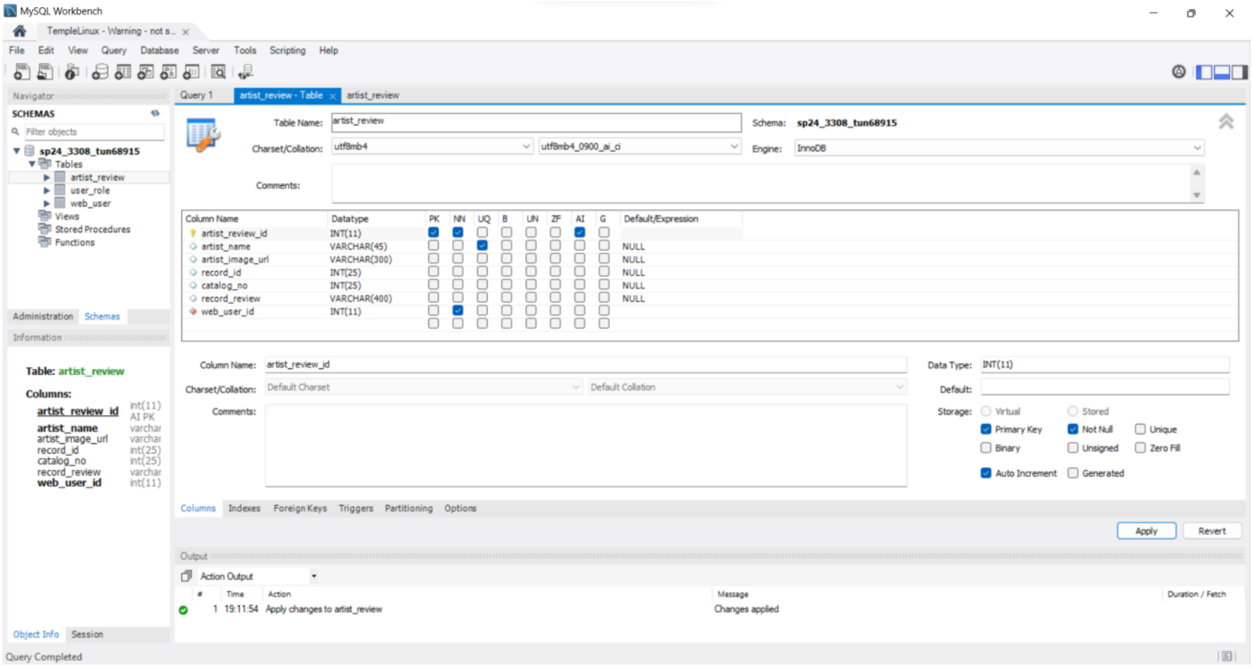


Table Name: artist_review
Schema: sp24_3308_tun68915
Charset/Collation: utf8mb4 utf8mb4_0900_ai_ci
Engine: InnoDB
Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
artist_review_id	INT(11)	☑	☑	□	□	□	□	☑	□	
artist_name	VARCHAR(45)	□	□	☑	□	□	□	□	□	NULL
artist_image_url	VARCHAR(300)	□	□	□	□	□	□	□	□	NULL
record_id	INT(25)	□	□	□	□	□	□	□	□	NULL
catalog_no	INT(25)	□	□	□	□	□	□	□	□	NULL
record_review	VARCHAR(400)	□	□	□	□	□	□	□	□	NULL
web_user_id	INT(11)	□	☑	□	□	□	□	□	□	

Table: artist_review

Columns:

artist_review_id	int(11) AI PK
artist_name	varchar
artist_image_url	varchar
record_id	int(25)
catalog_no	int(25)
record_review	varchar
web_user_id	int(11)

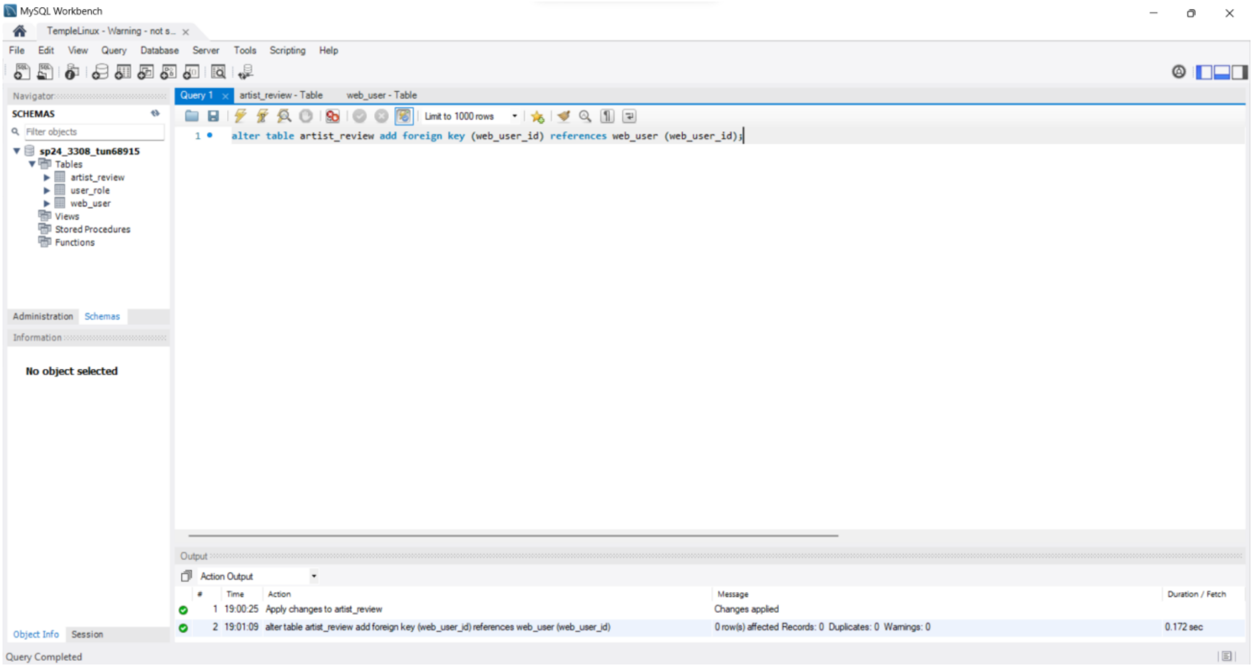
Column Name: artist_review_id
Data Type: INT(11)
Charset/Collation: Default Charset Default Collation
Default:
Comments:
Storage: ○ Virtual ○ Stored
☑ Primary Key ☑ Not Null □ Unique
□ Binary □ Unsigned □ Zero Fill
☑ Auto Increment □ Generated

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:11:54	Apply changes to artist_review	Changes applied	

2. Add a foreign key from your “other” database table to table web_user (meaning that “other”.web_user_id shall reference web_user.web_user_id). If you are unsure how to do this, re-read the MySQL Workbench tutorial, but recall that this is how you added a foreign key from web_user.user_role_id to user_role.user_role_id.



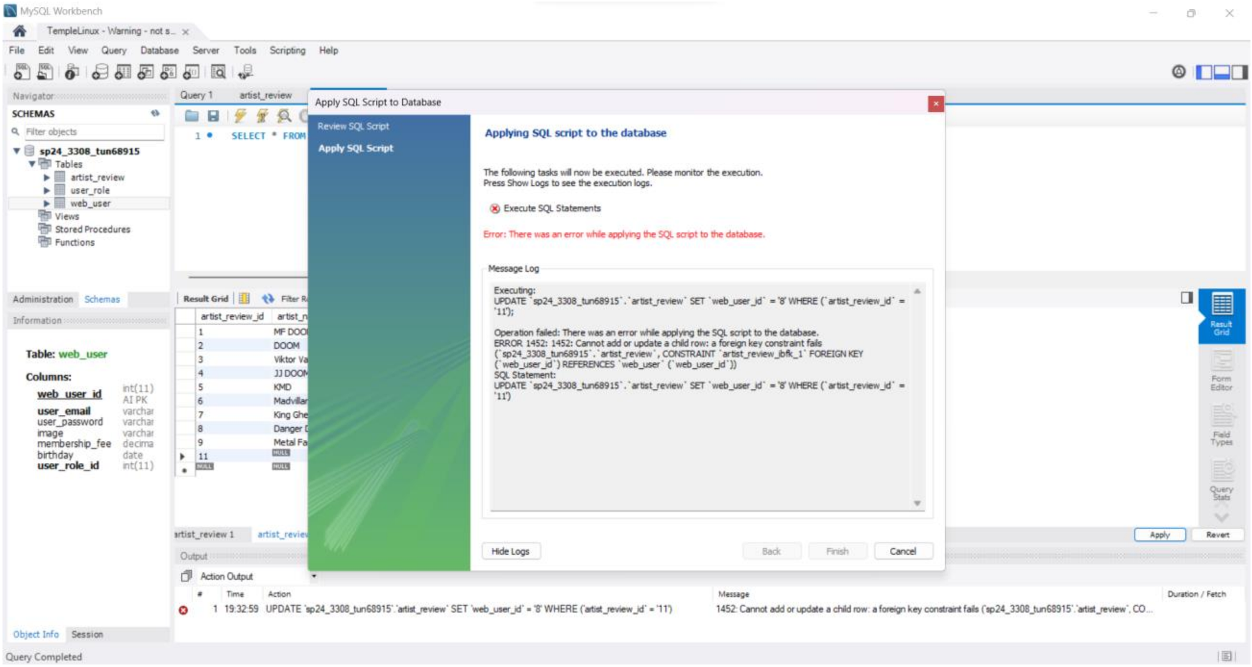
```
alter table artist_review add foreign key (web_user_id) references web_user (web_user_id);
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:00:25	Apply changes to artist_review	Changes applied	
2	19:01:09	alter table artist_review add foreign key (web_user_id) references web_user (web_user_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.172 sec

3. Try to add an “other” record with an invalid FK to web_user. Screen capture the Invalid FK from “other” to web_user and paste this into your document.



Applying SQL script to the database

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

☒ Execute SQL Statements

Error: There was an error while applying the SQL script to the database.

Message Log

```
Executing:
UPDATE `sp24_3308_tun68915`.`artist_review` SET `web_user_id` = '8' WHERE (`artist_review_id` =
'11');

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1452: 1452: Cannot add or update a child row: a foreign key constraint fails
(`sp24_3308_tun68915`.`artist_review`, CONSTRAINT `artist_review_ibfk_1` FOREIGN KEY
(`web_user_id`) REFERENCES `web_user` (`web_user_id`))
SQL Statement:
UPDATE `sp24_3308_tun68915`.`artist_review` SET `web_user_id` = '8' WHERE (`artist_review_id` =
'11')
```

Table: web_user

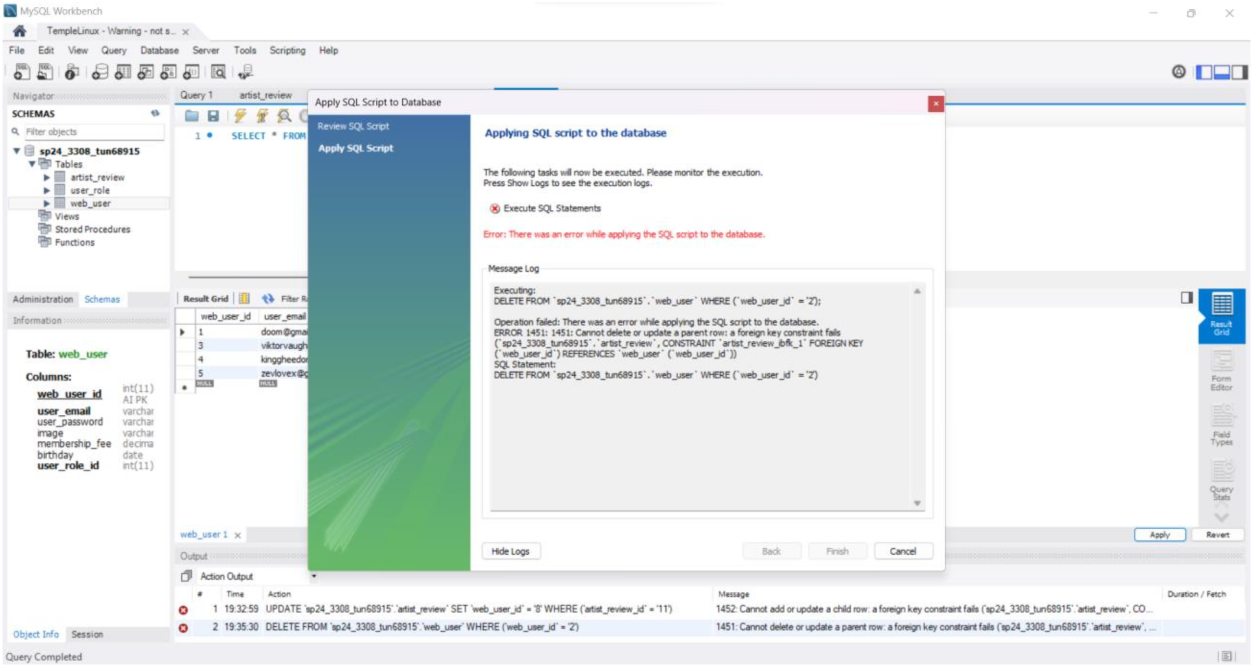
Columns:

```
web_user_id      int(11) AI PK
user_email       varchar
user_password    varchar
image            varchar
membership_fee   decima
birthday         date
user_role_id     int(11)
```

Action Output

```
#  Time      Action                                                                              Message
1  19:32:59  UPDATE 'sp24_3308_tun68915'.'artist_review' SET 'web_user_id' = '8' WHERE ('artist_review_id' = '11')   1452: Cannot add or update a child row: a foreign key constraint fails ('sp24_3308_tun68915'.'artist_review', CO...
```

4. Try to delete a web_user record that’s being referenced by an “other” record. Screen capture the Error - cannot delete a referenced web_user record and paste this into your document.



Applying SQL script to the database

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

☒ Execute SQL Statements

Error: There was an error while applying the SQL script to the database.

Message Log

```
Executing:
DELETE FROM `sp24_3308_tun68915`.`web_user` WHERE (`web_user_id` = '2');

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1451: 1451: Cannot delete or update a parent row: a foreign key constraint fails
(`sp24_3308_tun68915`.`artist_review`, CONSTRAINT `artist_review_ibfk_1` FOREIGN KEY
(`web_user_id`) REFERENCES `web_user` (`web_user_id`))
SQL Statement:
DELETE FROM `sp24_3308_tun68915`.`web_user` WHERE (`web_user_id` = '2')
```

Table: web_user

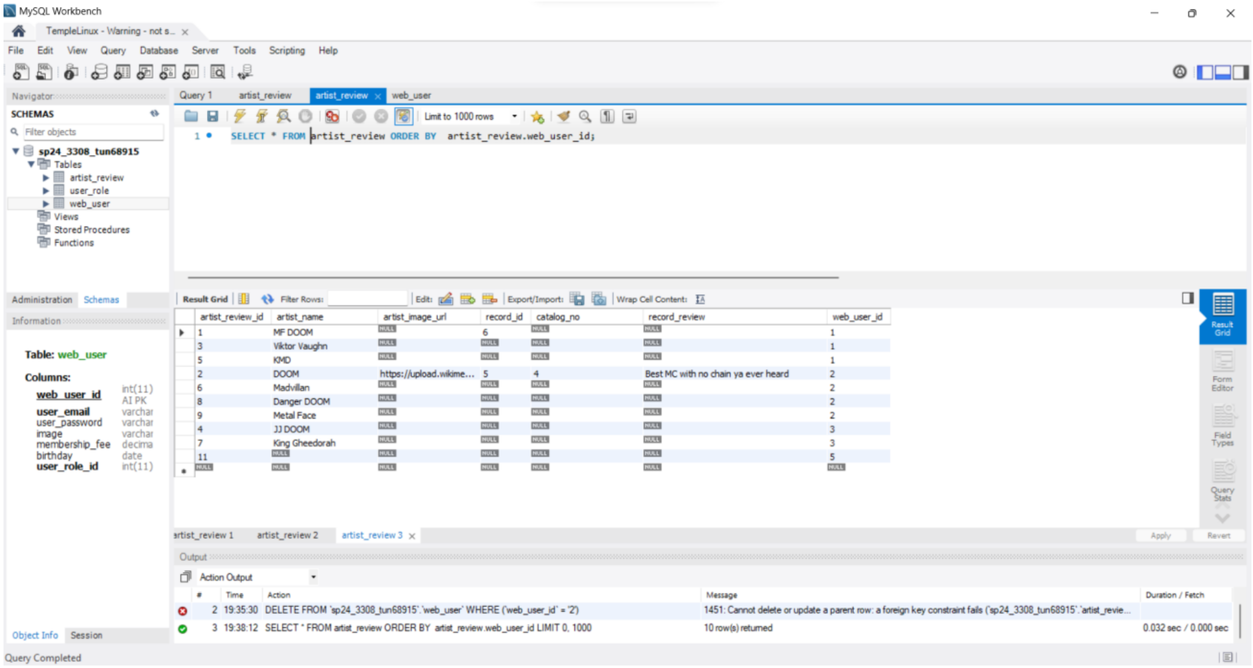
Columns:

```
web_user_id      int(11) AI PK
user_email       varchar
user_password    varchar
image            varchar
membership_fee   decima
birthday         date
user_role_id     int(11)
```

Action Output

```
#  Time      Action                                                                              Message
1  19:32:59  UPDATE 'sp24_3308_tun68915'.'artist_review' SET 'web_user_id' = '8' WHERE ('artist_review_id' = '11')   1452: Cannot add or update a child row: a foreign key constraint fails ('sp24_3308_tun68915'.'artist_review', CO...
2  19:35:30  DELETE FROM 'sp24_3308_tun68915'.'web_user' WHERE ('web_user_id' = '2')                 1451: Cannot delete or update a parent row: a foreign key constraint fails ('sp24_3308_tun68915'.'artist_review', ...
```

5. A select statement showing all the data from your “other” table (all rows, all columns, SELECT * is OK), sorted by the id of your “other” table.

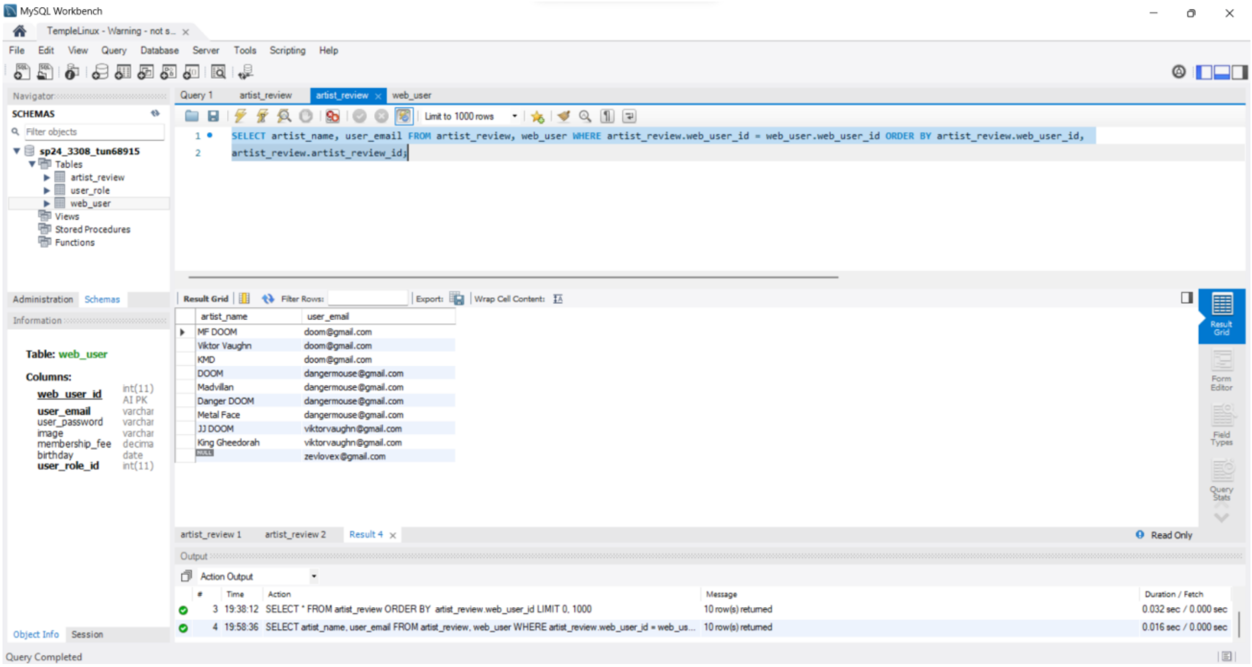


```
SELECT * FROM artist_review ORDER BY  artist_review.web_user_id;
```

artist_review_id	artist_name	artist_image_url	record_id	catalog_no	record_review	web_user_id
1	MF DOOM	NULL	6	NULL	NULL	1
3	Viktor Vaughn	NULL	NULL	NULL	NULL	1
5	KMD	NULL	NULL	NULL	NULL	1
2	DOOM	https://upload.wikime...	5	4	Best MC with no chain ya ever heard	2
6	Madvillan	NULL	NULL	NULL	NULL	2
8	Danger DOOM	NULL	NULL	NULL	NULL	2
9	Metal Face	NULL	NULL	NULL	NULL	2
4	JJ DOOM	NULL	NULL	NULL	NULL	3
7	King Gheedorah	NULL	NULL	NULL	NULL	3
11	NULL	NULL	NULL	NULL	NULL	5
NULL	NULL	NULL	NULL	NULL	NULL	NULL

```
#  Time      Action                                                                   Message                                                                                      Duration / Fetch
2  19:35:30  DELETE FROM 'sp24_3308_tun68915'.'web_user' WHERE ('web_user_id' = '2')  1451: Cannot delete or update a parent row: a foreign key constraint fails ('sp24_3308_tun68915'.'artist_revie...
3  19:38:12  SELECT * FROM artist_review ORDER BY  artist_review.web_user_id LIMIT 0, 1000  10 row(s) returned                                                                       0.032 sec / 0.000 sec
```

6. A select statement of your “other” table joined with web_user (all rows), showing just the descriptive field from your “other” table and then the user email address from web_user. To have a primary then secondary sort, you just specify two columns after the ORDER BY (e.g., ORDER BY col1, col2). Note: there should be as many rows in this result set as there were in the above result set.

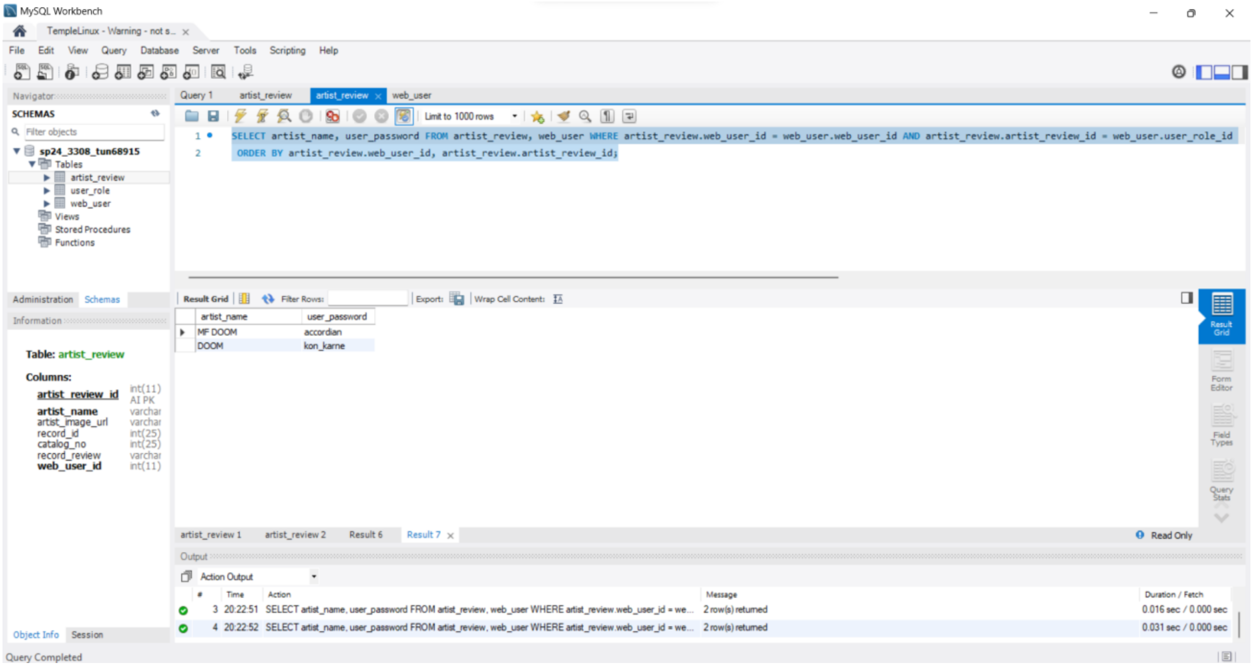


```
SELECT artist_name, user_email FROM artist_review, web_user WHERE artist_review.web_user_id = web_user.web_user_id ORDER BY artist_review.web_user_id,
artist_review.artist_review_id;
```

artist_name	user_email
MF DOOM	doom@gmail.com
Viktor Vaughn	doom@gmail.com
KMD	doom@gmail.com
DOOM	dangermouse@gmail.com
Madvillan	dangermouse@gmail.com
Danger DOOM	dangermouse@gmail.com
Metal Face	dangermouse@gmail.com
JJ DOOM	viktorvaughn@gmail.com
King Gheedorah	viktorvaughn@gmail.com
NULL	zevlovex@gmail.com

```
#  Time      Action                                                                                Message             Duration / Fetch
3  19:38:12  SELECT * FROM artist_review ORDER BY  artist_review.web_user_id LIMIT 0, 1000            10 row(s) returned  0.032 sec / 0.000 sec
4  19:58:36  SELECT artist_name, user_email FROM artist_review, web_user WHERE artist_review.web_user_id = web_us...  10 row(s) returned  0.016 sec / 0.000 sec
```

7. A select statement of your “other” table joined with web_user (but just some rows). It would be the same select statement as above, but filtering out some of the rows by adding additional criteria to your WHERE clause.



```
SELECT artist_name, user_password FROM artist_review, web_user WHERE artist_review.web_user_id = web_user.web_user_id AND artist_review.artist_review_id = web_user.user_role_id
 ORDER BY artist_review.web_user_id, artist_review.artist_review_id;
```

artist_name	user_password
MF DOOM	accordian
DOOM	kon_karne

Table: artist_review

Columns:

artist_review_id	int(11) AI PK
artist_name	varchar
artist_image_url	varchar
record_id	int(25)
catalog_no	int(25)
record_review	varchar
web_user_id	int(11)

```
#  Time      Action                                                                              Message             Duration / Fetch
3  20:22:51  SELECT artist_name, user_password FROM artist_review, web_user WHERE artist_review.web_user_id = we...  2 row(s) returned  0.016 sec / 0.000 sec
4  20:22:52  SELECT artist_name, user_password FROM artist_review, web_user WHERE artist_review.web_user_id = we...  2 row(s) returned  0.031 sec / 0.000 sec
```