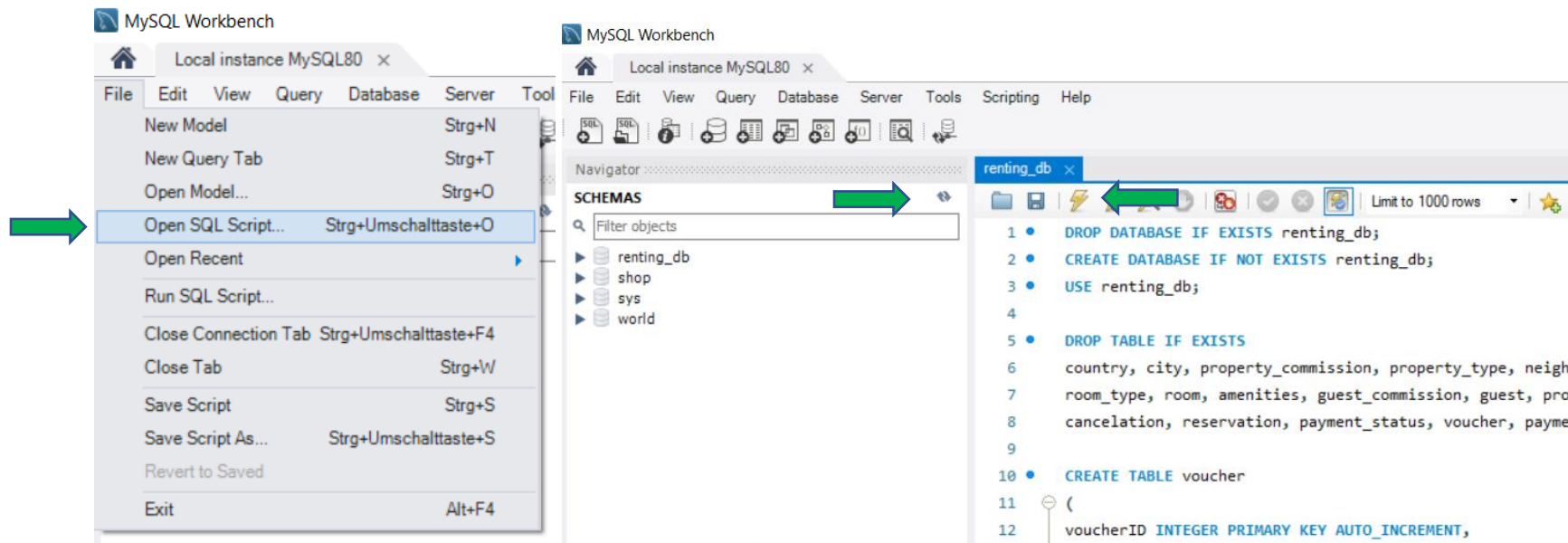## Database for renting houses, apartments, and rooms

Final Phase

Installation:

renting_db.sql

Download   file on local machine. Make sure MySQL is already installed on machine. From MySQL Workbench click
File, Open SQL Scripts, choose "renting_db.sql" file, click "execute" icon to run the script and then click "refresh" button in
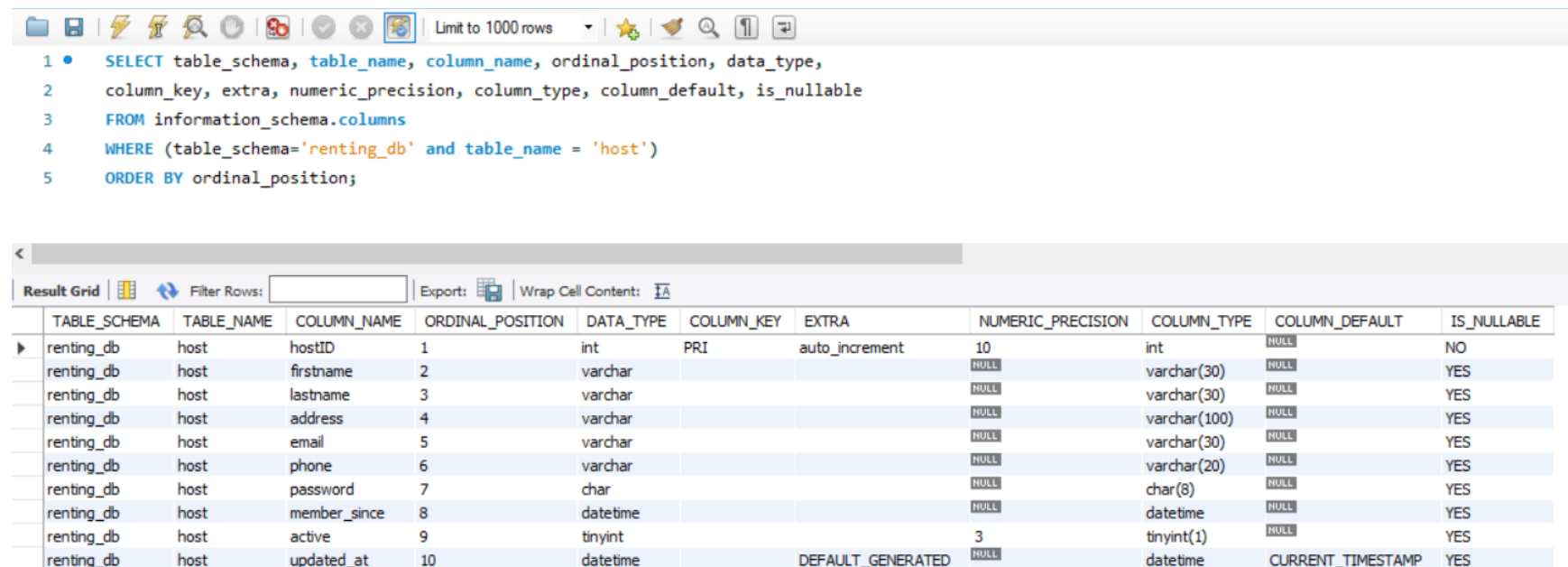SCHEMAS.

Metadata:

Use following SQL command to get metadata information from a specific table.

SQL Command:

SELECT table_schema, table_name, column_name, ordinal_position, data_type,

column_key, extra, numeric_precision, column_type, column_default, is_nullable

FROM information_schema.columns

WHERE (table_schema='renting_db' and table_name = 'host')

 ORDER BY ordinal_position;

```
1 •  SELECT table_schema, table_name, column_name, ordinal_position, data_type,
2    column_key, extra, numeric_precision, column_type, column_default, is_nullable
3    FROM information_schema.columns
4    WHERE (table_schema='renting_db' and table_name = 'host')
5    ORDER BY ordinal_position;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	ORDINAL_POSITION	DATA_TYPE	COLUMN_KEY	EXTRA	NUMERIC_PRECISION	COLUMN_TYPE	COLUMN_DEFAULT	IS_NULLABLE
renting_db	host	hostID	1	int	PRI	auto_increment	10	int	NULL	NO
renting_db	host	firstname	2	varchar			NULL	varchar(30)	NULL	YES
renting_db	host	lastname	3	varchar			NULL	varchar(30)	NULL	YES
renting_db	host	address	4	varchar			NULL	varchar(100)	NULL	YES
renting_db	host	email	5	varchar			NULL	varchar(30)	NULL	YES
renting_db	host	phone	6	varchar			NULL	varchar(20)	NULL	YES
renting_db	host	password	7	char			NULL	char(8)	NULL	YES
renting_db	host	member_since	8	datetime			NULL	datetime	NULL	YES
renting_db	host	active	9	tinyint			3	tinyint(1)	NULL	YES
renting_db	host	updated_at	10	datetime		DEFAULT_GENERATED	NULL	datetime	CURRENT_TIMESTAMP	YES

renting_db Functionality:

Data-driven decision-making empowers businesses to create real-time insights and forecasts to improve their performance. Through this, companies can test the success of various strategies and make informed business decisions for sustainable growth. Here are some use cases and functional aspects of renting_db.

- To verify suspicious payments by the guests

```sql
Limit to 1000 rows

1   SELECT paymentID, reservationID,
2       firstname, lastname, email,
3       amount, payment_status
4   FROM renting_db.payment
5   NATURAL JOIN renting_db.payment_status
6   NATURAL JOIN renting_db.reservation
7   NATURAL JOIN renting_db.guest
8   WHERE payment_status LIKE 'F%';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

paymentID	reservationID	firstname	lastname	email	amount	payment_status
20	20	Debbie	Mcknight	kperez@example.com	340.00	Further Processing Required
18	18	Vickie	Williams	juliecox@example.org	750.00	Fraud

▪ To ban a guest who received awful reviews from a host. In this example, guestID #16 received significant terrible reviews from the host. This type of guest should be completely banned from the market to save the image of the whole market.
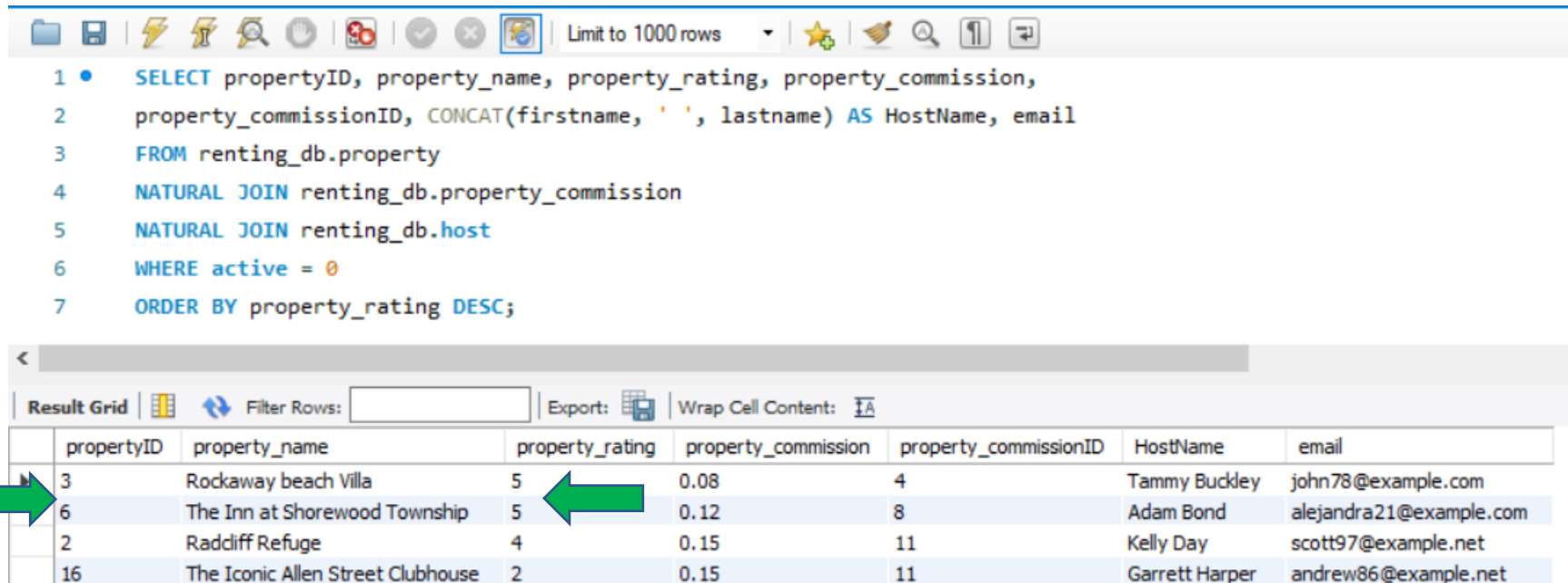


```
1 ●    SELECT guest_rate, CONCAT(firstname, ' ', lastname) AS GuestName, email, guestID, guest_review
2       FROM renting_db.guest_review
3       NATURAL JOIN renting_db.guest
4       WHERE guest_rate < 3
5       ORDER BY guest_rate;
```

guest_rate	GuestName	email	guestID	guest_review
1	Jimmy Chapman	psantana@example.net	16	They damaged several belongings and furniture including a burned kettle and a broken chair.
2	Annette Hayes	cole40@example.org	12	Didn't follow the house rules.
2	Candice Le	brendajones@example.org	13	We are very clear about our no smoking policy with even signs displayed prominently in the apartment. …
2	Kenneth Luna	camachogina@example.net	14	The party included two more people than specified and then complained because we had not made bed…
2	Yolanda Burgess	brandonwarner@example.com	15	Not recommended! We almost lost our vacation rental permit because of all the chaos they caused in th…
2	Timothy Munoz	ugolden@example.org	17	We had a disappointing experience with this guest party. Empty beer cans left lying everywhere
2	Catherine Rodriguez	tgibson@example.org	19	The guest had no respect for others in the shared space. They played music loudly.

- Filter inactive host where property rating is incredible. Give these types of property host a better commission offer to motivate them to be more active. In this example, propertyID #3 and propertyID #6 have a significantly excellent rating from the guests. This type of property host should be best candidate to get a better commission model to improve the quality of the whole market.

```sql
1 • SELECT propertyID, property_name, property_rating, property_commission,
2   property_commissionID, CONCAT(firstname, ' ', lastname) AS HostName, email
3   FROM renting_db.property
4   NATURAL JOIN renting_db.property_commission
5   NATURAL JOIN renting_db.host
6   WHERE active = 0
7   ORDER BY property_rating DESC;
```

propertyID	property_name	property_rating	property_commission	property_commissionID	HostName	email
3	Rockaway beach Villa	5	0.08	4	Tammy Buckley	john78@example.com
6	The Inn at Shorewood Township	5	0.12	8	Adam Bond	alejandra21@example.com
2	Radcliff Refuge	4	0.15	11	Kelly Day	scott97@example.net
16	The Iconic Allen Street Clubhouse	2	0.15	11	Garrett Harper	andrew86@example.net