1. Table Creation

```sql
1  CREATE TABLE menu (
2      restaurant_id INT NOT NULL,
3      item_name VARCHAR(100) NOT NULL,
4      price DECIMAL(10, 2) NOT NULL,
5      description TEXT,
6      PRIMARY KEY (restaurant_id, item_name),
7      FOREIGN KEY (restaurant_id) REFERENCES restaurant(id));
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS 3   AZURE   SQL CONSOLE   COMMENTS

CREATE successfully executed. 9:46:11 AM

2. Sample Data Insertion

```sql
1  INSERT INTO restaurant (id, name, street_address, description)
2  VALUES
3  (1, 'Warteg Bahari', 'Jl. A', 'Simple restaurant that you can order food via touchscreen technology'),
4  (2, 'Warung Bakso', 'Jl. B', 'Restaurant specialized in making a delicacy from meatballs'),
5  (3, 'Warung Masakan Nusantara', 'Jl. C', 'Restaurant with Indonesian food');
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS 3   AZURE   SQL CONSOLE   COMMENTS

INSERT successfully executed. 3 rows were affected. 9:48:12 AM

```sql
1  INSERT INTO menu (restaurant_id, item_name, price, description)
2  VALUES
3  (1, 'Ayam', 1.00, 'Fried chicken.'),
4  (1, 'Nasi', 0.50, 'Rice.'),
5  (1, 'Sayur', 0.75, 'Vegetables.'),
6  (2, 'Bakso Komplet', 3.00, 'Meatball with noodle.'),
7  (2, 'Mi Ayam Bakso', 3.50, 'Noodle with chicken and meatball.'),
8  (2, 'Bakso Rudal', 4.00, 'Meatball with ground meat fillings.'),
9  (3, 'Nasi Goreng', 5.00, 'Simple fried rice with eggs.'),
10 (3, 'Nasi Goreng Rendang', 7.50, 'Fried rice with beef curry.'),
11 (3, 'Ayam Betutu', 10.00, 'Whole roasted chicken.');
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS 3   AZURE   SQL CONSOLE   COMMENTS

INSERT successfully executed. 9 rows were affected. 9:49:25 AM

```sql
1  INSERT INTO review (id, restaurant, user_name, rating, review_text, review_date)
2  VALUES
3  (1, 1, 'Budi', 4, 'Great and fast food serving','2025/03/10'),
4  (2, 1, 'Jono', 3, 'Wide variety to choose','2025/03/10'),
5  (3, 1, 'Asep', 5, 'Delicious','2025/03/10'),
6  (4, 1, 'Vika', 3, 'Crowded','2025/03/10'),
7  (5, 1, 'Citra', 2, 'Unhygiene','2025/03/10'),
8  (6, 2, 'Budi', 5, 'Amazing!','2025/03/11'),
9  (7, 2, 'Jono', 4, 'Had a wild mouth experience here','2025/03/11'),
10 (8, 2, 'Asep', 5, 'Delicious','2025/03/11'),
11 (9, 2, 'Vika', 2, 'Waited too long','2025/03/11'),
12 (10, 2, 'Citra', 4, 'The soup is rich','2025/03/11'),
13 (11, 3, 'Budi', 2, 'Pricey','2025/03/12'),
14 (12, 3, 'Jono', 5, 'Best Indo foods','2025/03/12'),
15 (13, 3, 'Asep', 3, 'Pricey','2025/03/12'),
16 (14, 3, 'Vika', 2, 'Pricey and the service is lame','2025/03/12'),
17 (15, 3, 'Citra', 4, 'Great experiences','2025/03/12');
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS 3   AZURE   SQL CONSOLE   COMMENTS

INSERT successfully executed. 15 rows were affected. 9:53:21 AM

3. Read

```
1  select *
2  from review
3  where restaurant = 2;
```

id	restaurant	user_name	rating	review_text	review_date
6	2	Budi	5	Amazing!	2025-03-11 00:00:00
7	2	Jono	4	Had a wild mouth experience here	2025-03-11 00:00:00
8	2	Asep	5	Delicious	2025-03-11 00:00:00
9	2	Vika	2	Waited too long	2025-03-11 00:00:00
10	2	Citra	4	The soup is rich	2025-03-11 00:00:00

CONSOLE **RE-RUN QUERY** **EXPORT** **OPEN**

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS 3 AZURE SQL CONSOLE COMMENTS

SELECT successfully executed. 9:59:19 AM

```
1  select *
2  from review
3  where rating>=4;
```

id	restaurant	user_name	rating	review_text	review_date
1	1	Budi	4	Great and fast food serving	2025-03-10 00:00:00
3	1	Asep	5	Delicious	2025-03-10 00:00:00
6	2	Budi	5	Amazing!	2025-03-11 00:00:00
7	2	Jono	4	Had a wild mouth experience here	2025-03-11 00:00:00
8	2	Asep	5	Delicious	2025-03-11 00:00:00
10	2	Citra	4	The soup is rich	2025-03-11 00:00:00
12	3	Jono	5	Best Indo foods	2025-03-12 00:00:00
15	3	Citra	4	Great experiences	2025-03-12 00:00:00

CONSOLE **RE-RUN QUERY** **EXPORT** **OPEN**

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS 3 AZURE SQL CONSOLE COMMENTS

SELECT successfully executed. 10:00:32 AM

Detach file from Container database | ▷ Run on active connection | ...
```
1  select rs.id, rs.name, rv.rating, rv.review_text
2  from restaurant as rs join
3  review as rv on rs.id=rv.restaurant;
```

id	name	rating	review_text
1	Warteg Bahari	4	Great and fast food serving
1	Warteg Bahari	3	Wide variety to choose
1	Warteg Bahari	5	Delicious
1	Warteg Bahari	3	Crowded
1	Warteg Bahari	2	Unhygiene
2	Warung Bakso	5	Amazing!
2	Warung Bakso	4	Had a wild mouth experience h...
2	Warung Bakso	5	Delicious
2	Warung Bakso	2	Waited too long
2	Warung Bakso	4	The soup is rich
3	Warung Masakan Nus...	2	Pricey
3	Warung Masakan Nus...	5	Best Indo foods
3	Warung Masakan Nus...	3	Pricey
3	Warung Masakan Nus...	2	Pricey and the service is lame
3	Warung Masakan Nus...	4	Great experiences

CONSOLE **RE-RUN QUERY** **EXPORT** **OPEN**

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS 3 AZURE SQL CONSOLE COMMENTS

SELECT successfully executed. 10:07:28 AM

4. Update

Detach file from Container database | ▷ Run on active connection | ≡ Select block
```
1  UPDATE restaurant
2  SET description = 'Restaurant with delicious Indonesian food'
3  WHERE id = 3;
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS 3 AZURE SQL CONSOLE COMMENTS

UPDATE successfully executed. 1 rows were affected. 4:45:01 AM

Detach file from Container database | ▷ Run on active connection | ...
```
1  UPDATE review
2  SET rating = 5
3  WHERE id = 1;
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS 3 AZURE S

UPDATE successfully executed. 1 rows were affected. 4:46:58 AM

5. **Delete**

```
Detach file from Container database | ▷ Run on active connection | ⋯
1   delete from review
2   where id=15;
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS **3**   AZURE

DELETE successfully executed. 1 rows were affected. 4:48:16 AM

Editing the foreign key for cascade delete

```
Detach file from Container database | ▷ Run on active connection | ≡ Select block
1   alter table review
2   drop constraint review_restaurant_fkey;
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS **3**   AZURE   SQL CONSOLE   C

ALTER successfully executed. 4:56:31 AM

```
Detach file from Container database | ▷ Run on active connection | ≡ Select block
1   alter table review
2   add constraint review_restaurant_fkey
3   foreign key (restaurant) references restaurant(id) on delete cascade;
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS **3**   AZURE   SQL CONSOLE   COMMENTS

ALTER successfully executed. 5:01:17 AM

Delete cascade (foreign key in the table "menu" is also changed)

```
Detach file from Container database | ▷ Run on active connection | ⋯
1   delete from restaurant
2   where id=3;
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS **3**   AZURE

DELETE successfully executed. 1 rows were affected. 5:05:48 AM

No more review for restaurant with the id of 3

```
Detach file from Container database | ▷ Run on active connection | ≡ Select block
1   select * from review
```

id	restaurant	user_name	rating	review_text
Filter…	Filter…	Filter…	Filter…	Filter…
2	1	Jono	3	Wide variety to cho
3	1	Asep	5	Delicious
4	1	Vika	3	Crowded
5	1	Citra	2	Unhygiene
6	2	Budi	5	Amazing!
7	2	Jono	4	Had a wild mouth
8	2	Asep	5	Delicious
9	2	Vika	2	Waited too long
10	2	Citra	4	The soup is rich
1	1	Budi	5	Great and fast food

CONSOLE   RE-RUN QUERY   EXPORT   OPEN   1-10 of 10

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS **3**   AZURE   SQL CONSOLE   COMMENTS

SELECT successfully executed. 5:06:42 AM

6. Additional Queries

a. Find the highest-rated restaurant based on the average rating of all its reviews.

```sql
select rs.id, rs.name, AVG(rv.rating) as average_rating
from restaurant as rs join
review as rv on rs.id=rv.restaurant
GROUP BY rs.id
ORDER BY average_rating desc;
```

id	name	average_rating
2	Warung Bakso	4.0000000000000000
1	Warteg Bahari	3.4000000000000000
3	Warung Masakan Nusantara	3.2000000000000000

SELECT successfully executed. 10:14:09 AM

b. Find the number of reviews each restaurant has received.

```sql
select rs.id, rs.name, COUNT(rv.rating) as review_count
from restaurant as rs join
review as rv on rs.id=rv.restaurant
GROUP BY rs.id
ORDER BY review_count desc;
```

id	name	review_count
2	Warung Bakso	5
3	Warung Masakan Nusantara	5
1	Warteg Bahari	5

SELECT successfully executed. 10:17:08 AM

c. Display the most recent review for each restaurant.
All review

```sql
select rv.review_date, rs.name, rv.rating, rv.review_text
from restaurant as rs join
review as rv on rs.id=rv.restaurant
ORDER BY review_date desc;
```

review_date	name	rating	review_text
2025-03-12 00:00:00	Warung Masakan Nusantara	4	Great experiences
2025-03-12 00:00:00	Warung Masakan Nusantara	2	Pricey and the service is lame
2025-03-12 00:00:00	Warung Masakan Nusantara	2	Pricey
2025-03-12 00:00:00	Warung Masakan Nusantara	3	Pricey
2025-03-12 00:00:00	Warung Masakan Nusantara	5	Best Indo foods
2025-03-11 00:00:00	Warung Bakso	5	Delicious
2025-03-11 00:00:00	Warung Bakso	5	Amazing!
2025-03-11 00:00:00	Warung Bakso	4	Had a wild mouth experience here
2025-03-11 00:00:00	Warung Bakso	2	Waited too long
2025-03-11 00:00:00	Warung Bakso	4	The soup is rich
2025-03-10 00:00:00	Warteg Bahari	4	Great and fast food serving
2025-03-10 00:00:00	Warteg Bahari	2	Unhygiene
2025-03-10 00:00:00	Warteg Bahari	3	Crowded
2025-03-10 00:00:00	Warteg Bahari	5	Delicious
2025-03-10 00:00:00	Warteg Bahari	3	Wide variety to choose

SELECT successfully executed. 10:19:51 AM

Most recent review

```sql
select distinct on (rv.review_date) rv.review_date, rs.name, rv.rating, rv.review_text
from restaurant as rs
join review as rv on rs.id = rv.restaurant
ORDER BY rv.review_date desc;
```

review_date	name	rating	review_text
2025-03-12 00:00:00	Warung Masakan Nusantara	4	Great experiences
2025-03-11 00:00:00	Warung Bakso	5	Delicious
2025-03-10 00:00:00	Warteg Bahari	4	Great and fast food serving

1-3 of 3

SELECT successfully executed. 10:29:26 AM

* Query update dan delete dikerjakan terakhir