Title: DB Assignment 2
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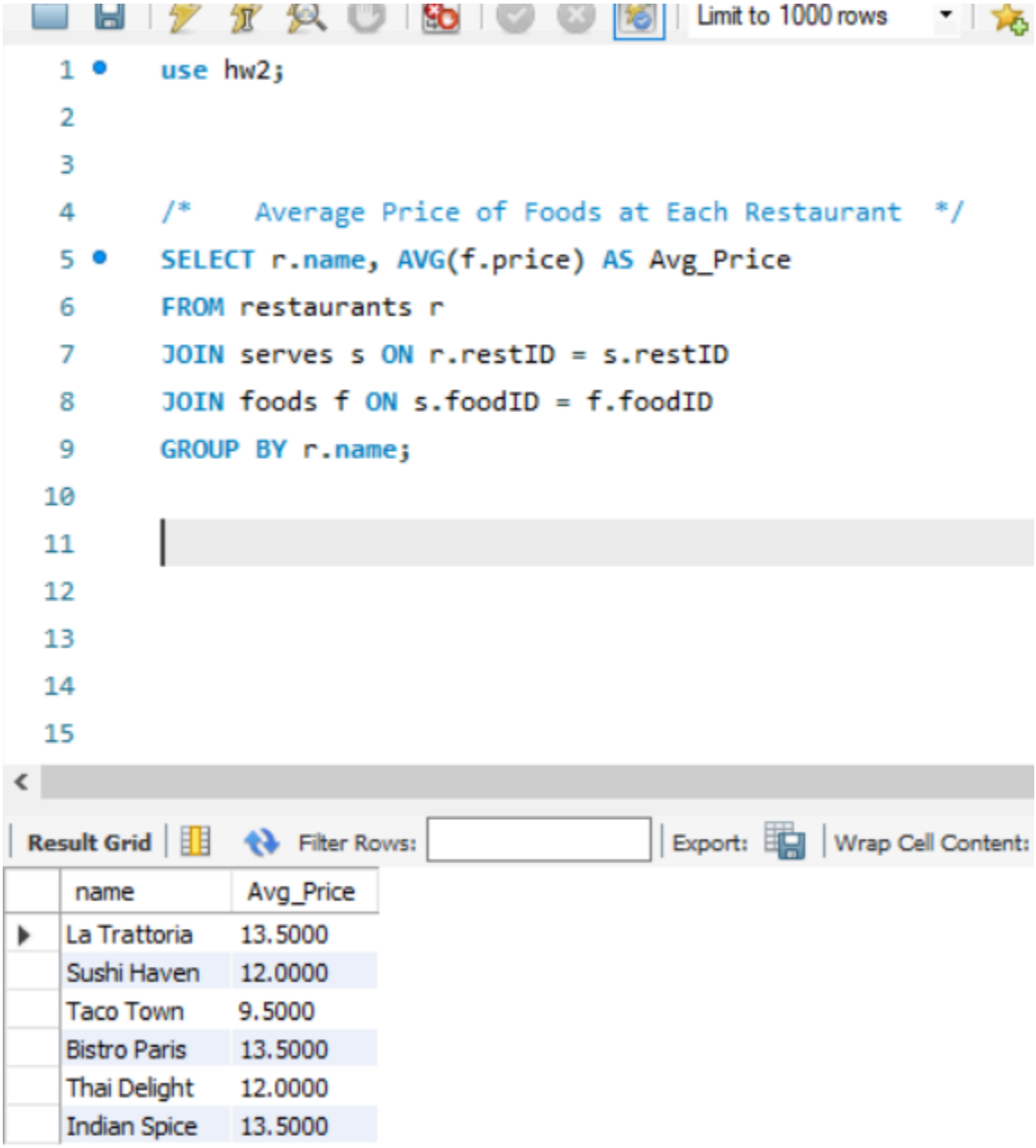
Date: 26 Sept 24

1. Average Price of Foods at Each Restaurant



```
use hw2;


/*    Average Price of Foods at Each Restaurant  */
SELECT r.name, AVG(f.price) AS Avg_Price
FROM restaurants r
JOIN serves s ON r.restID = s.restID
JOIN foods f ON s.foodID = f.foodID
GROUP BY r.name;
```

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

name	Avg_Price
La Trattoria	13.5000
Sushi Haven	12.0000
Taco Town	9.5000
Bistro Paris	13.5000
Thai Delight	12.0000
Indian Spice	13.5000

The query selects data from three tables involved with averaging prices: restaurants, serves, and foods. Join links these tables using shared identifiers (restID and foodID). For each restaurant, it finds the prices of all foods served there, averages these prices and displays the average alongside the restaurant's name.

2. Maximum Food price at each restaurant

```
11      /* Maximum Food Price at Each Restaurant */
12 •    SELECT r.name, MAX(f.price) AS Max_Price
13      FROM restaurants r
14      JOIN serves s ON r.restID = s.restID
15      JOIN foods f ON s.foodID = f.foodID
16      GROUP BY r.name;
17
```

Result Grid | Filter Rows: | Export: | Wrap

name	Max_Price
La Trattoria	15
Sushi Haven	14
Taco Town	11
Bistro Paris	18
Thai Delight	13
Indian Spice	15

The query selects data from three tables involved with finding maximum food prices: restaurants, serves, and foods. It uses joins to link these tables using shared identifiers (restID and foodID). For each restaurant, it finds the prices of all foods served, determines the maximum price, and displays this maximum alongside the restaurant's name.

3. Count of Different Food Types Served at Each Restaurant

```
18      /* Count of Different Food Types Served at Each Restaurant */
19  •   SELECT r.name, COUNT(f.type) AS Food_Type_Count
20      FROM restaurants r
21      JOIN serves s ON r.restID = s.restID
22      JOIN foods f ON s.foodID = f.foodID
23      GROUP BY r.name;
24
25
```

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

name	Food_Type_Count
La Trattoria	2
Sushi Haven	2
Taco Town	2
Bistro Paris	2
Thai Delight	2
Indian Spice	2

The query selects data from three tables involved with counting different food types: restaurants, serves, and foods. It uses joins to link these tables using shared identifiers (restID and foodID). For each restaurant, it counts the distinct food types served and displays this count alongside the restaurant's name.

4. Average Price of Foods Served by Each Chef

```
25      /* Average Price of Foods Served by Each Chef */
26      SELECT c.name AS Chef_Name, AVG(f.price) AS Avg_Price
27      FROM chefs c
28      JOIN works w ON c.chefID = w.chefID
29      JOIN serves s ON w.restID = s.restID
30      JOIN foods f ON s.foodID = f.foodID
31      GROUP BY c.name;
32
33
34
```

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

Chef_Name	Avg_Price
John Doe	11.5000
Jane Smith	12.7500
Robert Brown	12.7500
Alice Johnson	11.5000
Emily Davis	12.7500
Michael Wilson	12.7500

The query selects data from four tables involved with averaging food prices served by chefs: chefs, works, serves, and foods. It uses joins to link these tables using shared identifiers (chefID and restID). For each chef, it calculates the average price of the foods they serve and displays this average alongside the chef's name.

5. Find the Restaurant with the Highest Average Food Price

```
/*  Find the Restaurant with the Highest Average Food Price   */
SELECT r.name AS Restaurant, AVG(f.price) AS Avg_Price
FROM restaurants r
JOIN serves s ON r.restID = s.restID
JOIN foods f ON s.foodID = f.foodID
GROUP BY r.name
ORDER BY Avg_Price DESC
LIMIT 1;
```

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

Restaurant	Avg_Price
La Trattoria	13.5000

The query selects data from three tables involved with finding the restaurant with the highest average food price: restaurants, serves, and foods. It uses joins to link these tables using shared identifiers (restID and foodID). For each restaurant, it calculates the average price of the foods served, orders the results by average price in descending order, and displays the restaurant with the highest average price.

BONUS:

```
/* Bonus */
SELECT c.name AS Chef_Name, AVG(f.price) AS Avg_Food_Price, GROUP_CONCAT(r.name) AS Restaurants
FROM chefs c
JOIN works w ON c.chefID = w.chefID
JOIN restaurants r ON r.restID = w.restID
JOIN serves s ON w.restID = s.restID
JOIN foods f ON s.foodID = f.foodID
GROUP BY c.name
ORDER BY Avg_Food_Price DESC
LIMIT 1;
```

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

Chef_Name	Avg_Food_Price	Restaurants
Emily Davis	12.7500	Thai Delight,Thai Delight,Indian Spice,Indian Spice