

- DB Assignment 2
- **Husam Alanazi**
- **Sep 23**

```
SELECT *
FROM chefs;
```

**Explanation:**

Shows all the chefs from the "chefs" table. It includes the ID, name, and specialty of each chef. It helps to list the entire data of chefs.

Result Grid		
1	John Doe	Italian
2	Jane Smith	Japanese
3	Alice Johnson	Mexican
4	Robert Brown	French
5	Emily Davis	Thai
6	Michael Wilson	Indian
NULL	NULL	NULL

```
SELECT *  
FROM restaurants;
```

**Explanation:**

All the restaurants from the "restaurants" table. It lists the ID, name, and location of each restaurant. It's useful for getting a full list of restaurants.

[illegible]

```
SELECT *  
FROM works;
```

**Explanation:**

Shows chefs and the restaurants they work in. It uses the "works" table to link the chef's ID with the restaurant's ID

The screenshot shows a database management interface with a query result grid. The grid displays data from the 'works' table, which links chefs to restaurants. The columns are labeled 'clrestID', 'chefID', and 'restaurantID'. The data is organized into rows, with the first row showing a chef ID of 1 and a restaurant ID of 1. The interface includes a top toolbar with options like 'Filter Rows', 'Search', 'Edit', and 'Export/Import'. A right sidebar contains icons for 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'. The bottom tab bar shows the 'works' table is currently selected, with other tabs for 'chefs 83', 'restaurants 84', 'foods 86', and 'serves 87'.

clrestID	chefID	restaurantID
1	1	1
2	1	2
2	2	2
4	2	4
1	3	3
3	3	4
4	4	4
5	5	5
6	5	6
6	6	6
1	NULL	1

```
SELECT *  
FROM foods;
```

**Explanation:**

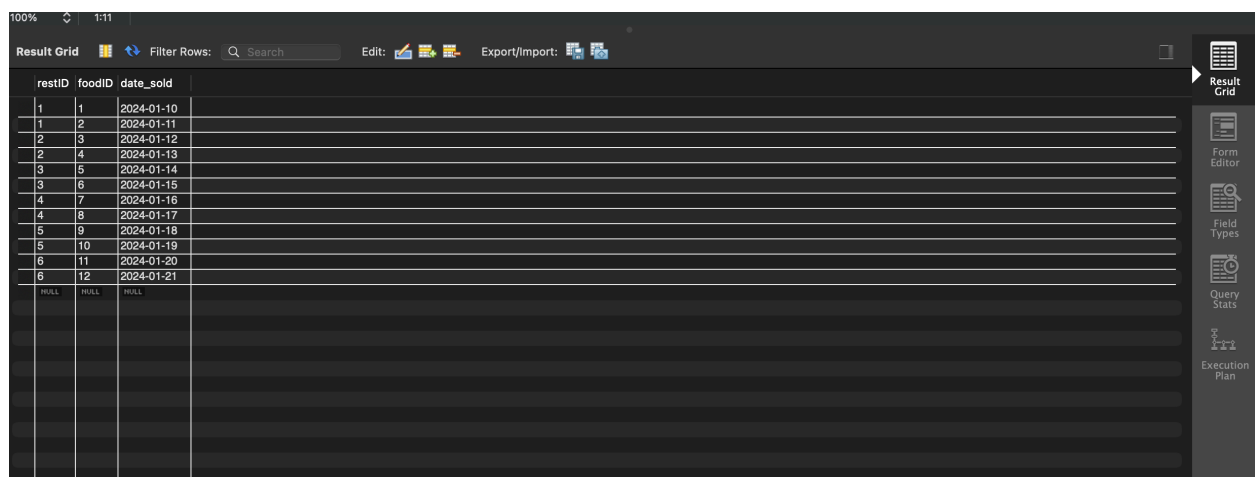
**Lists all the food items in the "foods" table, showing their name, type (like dessert or main course), and price.**

Result Grid			
Filter Rows:		Search	Edit: Export/Import:
foodID	name	type	price
1	Pasta	Italian	12.00
2	Lasagna	Italian	15.00
3	Sushi	Japanese	10.00
4	Tempura	Seafood	14.00
5	Tacos	Mexican	8.00
6	Burrito	Mexican	11.00
7	Croque Monsieur	French	18.00
8	Crepes	French	9.00
9	Pad Thai	Thai	13.00
10	Green Curry	Thai	11.00
11	Butter Chicken	Indian	12.00
12	Paneer Tikka	Indian	15.00
HULL	HULL	HULL	HULL

```
SELECT *  
FROM serves;
```

### Explanation:

Shows which food items are served in which restaurants, including the date they were sold. It uses the "serves" table.



The screenshot shows a database query result grid. The top bar includes a zoom level of 100%, a search bar, and icons for editing and exporting. The main area displays a table with three columns: restID, foodID, and date\_sold. The table contains 12 rows of data, with the first 11 rows having numerical values and the 12th row containing NULL values. A sidebar on the right contains icons for Result Grid, Form Editor, Field Types, Query Stats, and Execution Plan.

restID	foodID	date_sold
1	1	2024-01-10
1	2	2024-01-11
2	3	2024-01-12
2	4	2024-01-13
3	5	2024-01-14
3	6	2024-01-15
4	7	2024-01-16
4	8	2024-01-17
5	9	2024-01-18
5	10	2024-01-19
6	11	2024-01-20
6	12	2024-01-21
NULL	NULL	NULL

```

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;

```

**Explanation:**

This query calculates the average price of food items served at each restaurant. It groups the results by restaurant name and averages the price.

	Restaurant	Average Price	
	La Trattoria	13.50	
	Sushi Haven	12.00	
	Taco Town	9.50	
	Bistro Paris	13.50	
	Thai Delight	12.00	
	Indian Spice	13.50	

```
• SELECT r.name AS restaurant, MAX(f.price) AS max_price  
  FROM restaurants r  
  JOIN serves s ON r.restID = s.restID  
  JOIN foods f ON s.foodID = f.foodID  
  GROUP BY r.name;
```

**Explanation:**

This query finds the most expensive food item at each restaurant. It groups the restaurants and finds the highest price for each one.

	Restaurant	Max Price	
	La Trattoria	15.00	
	Sushi Haven	14.00	
	Taco Town	11.00	
	Bistro Paris	18.00	
	Thai Delight	13.00	
	Indian Spice	15.00	



```

• SELECT r.name AS restaurant, COUNT(DISTINCT f.type) AS food_types_count
  FROM restaurants r
  JOIN serves s ON r.restID = s.restID
  JOIN foods f ON s.foodID = f.foodID
 GROUP BY r.name;

```

**Explanation:**

This query counts how many different types of food each restaurant serves.

Restaurant	Food Types	
Bistro Paris	1	
Indian Spice	1	
La Trattoria	1	
Sushi Haven	2	
Taco Town	1	
Thai Delight	1	

```

• SELECT c.name AS chef, AVG(f.price) AS avg_food_price
  FROM chefs c
  JOIN works w ON c.chefID = w.chefID
  JOIN serves s ON w.restID = s.restID
  JOIN foods f ON s.foodID = f.foodID
 GROUP BY c.name;

```

**Explanation:**

This query calculates the average price of the dishes prepared by each chef

Restaurant	Food Types	
Bistro Paris	1	
Indian Spice	1	
La Trattoria	1	
Sushi Haven	2	
Taco Town	1	
Thai Delight	1	

How do we find the restaurant with the highest average

```

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;

```

#### Explanation:

This query finds the restaurant with the highest average food price. It ranks restaurants by average price and shows the one with the highest value.

	Restaurant	Average Price	
	La Trattoria	13.50	