

Title: DB Assignment 2

Your Name: Ryan Smith

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Github link: <https://github.com/rsmith1388/Databases.git>

The screenshot shows the MySQL Workbench interface. The main window displays a SQL query for 'Query 1: Average Price of Foods at Each Restaurant'. The query is as follows:

```
-- Query 1: Average Price of Foods at Each Restaurant
1
2
3 • Select r.name, AVG(f.price) AS average -- Calculates the average price at each restaurant and selects the restaurant names
4 from serves s
5 join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables through restID
6 join foods f ON s.foodID = f.foodID -- Joins the serves and foods tables through foodID
7 group by r.name; -- Groups the output by restaurant name
8
9
10
11 -- Query 2: Maximum Food Price at Each Restaurant
```

The 'Result Grid' shows the output of the query, displaying the restaurant names and their average food prices:

name	average
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 interface also includes a 'Navigator' on the left showing the database schema, and a 'SQLAdditions' panel on the right with a message about disabled context help. The bottom status bar shows the system time as 1:51 PM on 9/27/2024.

Query 1: Finds the average price of food at each restaurant by averaging. The query joins tables to access restaurant names and prices of each.

MySQL Workbench

Local instance MySQL90 - W...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

examples

Tables

Views

Stored Procedures

Functions

sakila

sys

Administration Schemas

Information

No object selected

Result Grid

Filter Rows: | Export: | Wrap Cell Contents: |

name maximum

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

Result 31 x

Output

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Read Only Context Help Snippets

Object Info Session

68°F Light rain 1:52 PM 9/27/2024

Query 2: Calculates the maximum price of an item at each restaurant. The query joins tables to access the restaurant names and food prices.

MySQL Workbench

Local instance MySQL90 - W...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

examples

Tables

Views

Stored Procedures

Functions

sakila

sys

Administration Schemas

Information

No object selected

Result Grid

Filter Rows: | Export: | Wrap Cell Contents: |

name count

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

Result 32 x

Output

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Read Only Context Help Snippets

Object Info Session

68°F Light rain 1:52 PM 9/27/2024

Query 3: Counts the number of food items served at each restaurant and joins the table to access restaurant names.

MySQL Workbench interface showing Query 4: Average Price of Food Served by Each Chef. The query is as follows:

```

28
29
30 -- Query 4: Average Price of Food Served by Each Chef
31
32 • Select w.chefID, AVG(f.price) AS average -- Calculates the average price of food for each chef and selects the chefIDs
33   from works w
34   join serves s ON w.restID = s.restID -- Joins the works and serves tables through restID
35   join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables through restID
36   join foods f ON s.foodID = f.foodID -- Joins the foods and serves tables through foodID
37   group by w.chefID; -- Groups the output by ChefID
38

```

The Result Grid shows the following data:

chefID	average
1	11.5000
2	12.7500
4	12.7500
3	11.5000
5	12.7500
6	12.7500

Query 4: Calculate the average price of foods served by each chef. The query joins tables to access prices and the chef's corresponding restaurants.

MySQL Workbench interface showing Query 5: Find the Restaurant with the Highest Average Food Price. The query is as follows:

```

39
40
41 -- Query 5: Find the Restaurant with the Highest Average Food Price
42
43 • Select r.name, AVG(f.price) AS average -- Calculates the average price at each restaurant and selects the restaurant names
44   from serves s
45   join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables through restID
46   join foods f ON s.foodID = f.foodID -- Joins the serves and foods tables through foodID
47   group by r.name -- Groups the output by restaurant name
48   limit 1; -- Limits the output to one restaurant name
49

```

The Result Grid shows the following data:

name	average
La Trattoria	13.5000

Query 5: Returns the restaurant with the highest average prices. The query joins tables to access the restaurant names and prices of each.

-- Query 1: Average Price of Foods at Each Restaurant

```
Select r.name, AVG(f.price) AS average -- Calculates the average price at each
restaurant and selects the restaurant names
from serves s
join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables
through restID
join foods f ON s.foodID = f.foodID -- Joins the serves and foods tables through
foodID
group by r.name; -- Groups the output by restaurant name
```

-- Query 2: Maximum Food Price at Each Restaurant

```
Select r.name, max(f.price) AS maximum -- Calculates the maximum price at each
restaurant and selects the restaurant names
from serves s
join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables
through restID
join foods f ON s.foodID = f.foodID -- Joins the serves and foods tables through
foodID
group by r.name; -- Groups the output by restaurant name
```

-- Query 3: Count of Different Foods Served at Each Restaurant

```
Select r.name, count(s.foodID) as count -- Calculates the amount of items at each
restaurant and selects the restaurant names
from serves s
join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables
through restID
```

group by r.name; -- Groups the output by restaurant name

-- Query 4: Average Price of Food Served by Each Chef

Select w.chefID, AVG(f.price) AS average -- Calculates the average price of food for each chef and selects the chefIDs

from works w

join serves s ON w.restID = s.restID -- Joins the works and serves tables through restID

join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables through restID

join foods f ON s.foodID = f.foodID -- Joins the foods and serves tables through foodID

group by w.chefID; -- Groups the output by ChefID

-- Query 5: Find the Restaurant with the Highest Average Food Price

Select r.name, AVG(f.price) AS average -- Calculates the average price at each restaurant and selects the restaurant names

from serves s

join restaurants r ON s.restID = r.restID -- Joins the restaurants and serves tables through restID

join foods f ON s.foodID = f.foodID -- Joins the serves and foods tables through foodID

group by r.name -- Groups the output by restaurant name

limit 1; -- Limits the output to one restaurant name