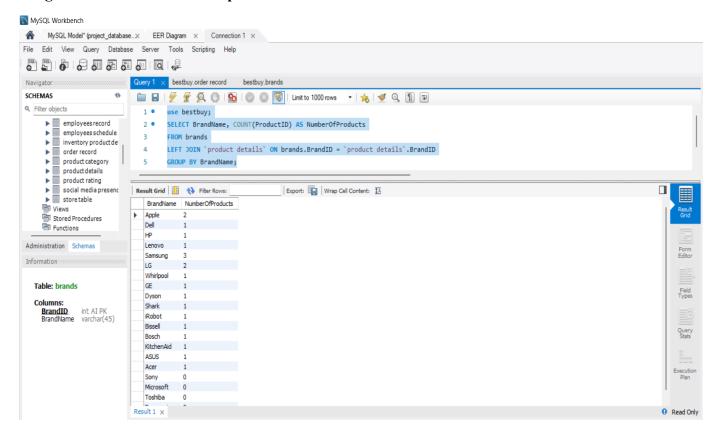# Business Functions Queries and Results
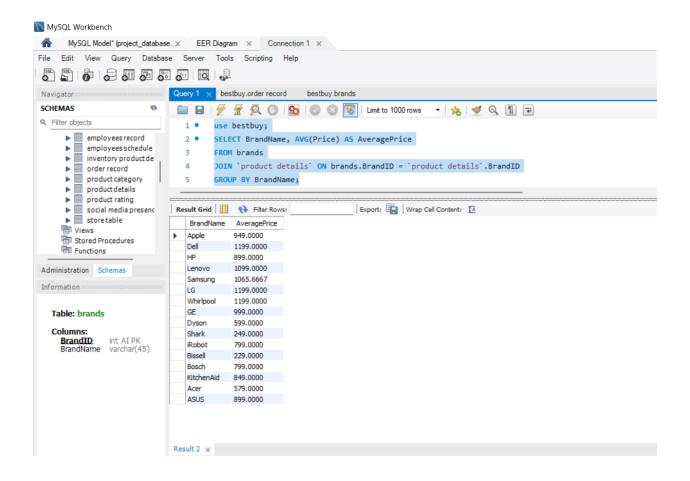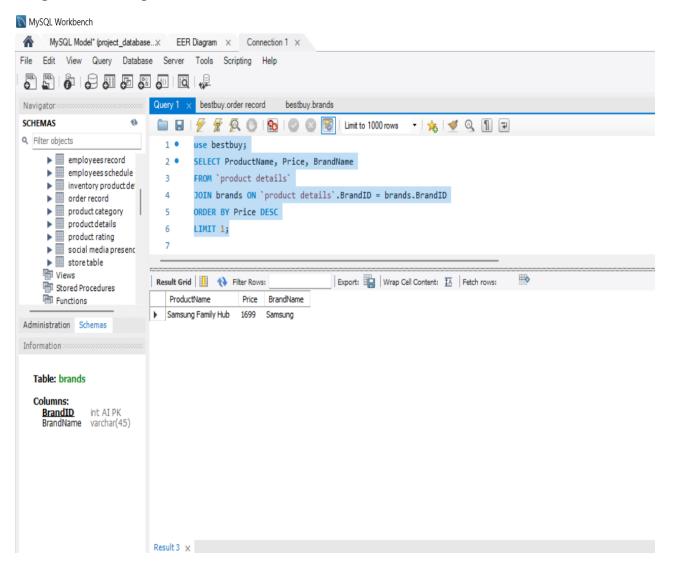
Insight1: Number of Products per Brand:
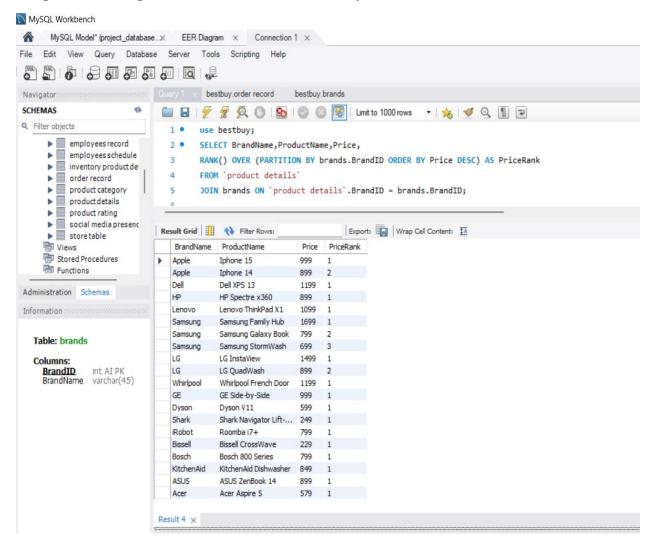
Insight 2: Average Price of Products by Brand

MySQL Workbench

MySQL Model* (project_database...×   EER Diagram   ×   Connection 1   ×

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

Query 1   ×   bestbuy.order record   bestbuy.brands

Limit to 1000 rows

```
1 ●   use bestbuy;
2 ●   SELECT BrandName, AVG(Price) AS AveragePrice
3     FROM brands
4     JOIN `product details` ON brands.BrandID = `product details`.BrandID
5     GROUP BY BrandName;
```

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

BrandName	AveragePrice
Apple	949.0000
Dell	1199.0000
HP	899.0000
Lenovo	1099.0000
Samsung	1065.6667
LG	1199.0000
Whirlpool	1199.0000
GE	999.0000
Dyson	599.0000
Shark	249.0000
iRobot	799.0000
Bissell	229.0000
Bosch	799.0000
KitchenAid	849.0000
Acer	579.0000
ASUS	899.0000

Navigator:

SCHEMAS

Filter objects

- employees record
- employees schedule
- inventory product de
- order record
- product category
- product details
- product rating
- social media presenc
- store table
- Views
- Stored Procedures
- Functions

Administration   Schemas

Information

Table: brands

Columns:
BrandID   int AI PK
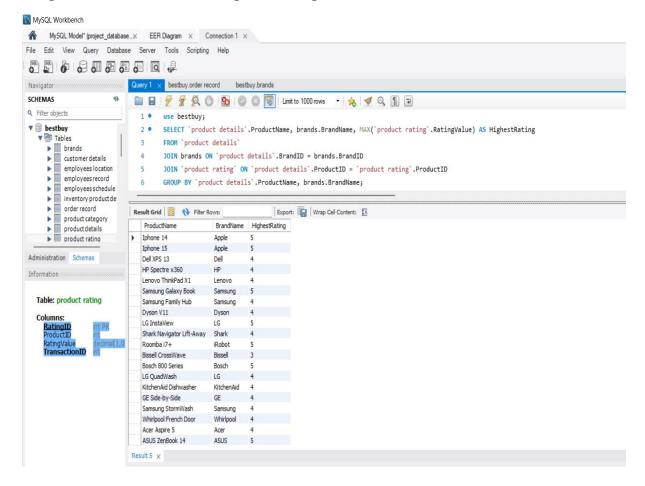BrandName   varchar(45)

Result 2   ×

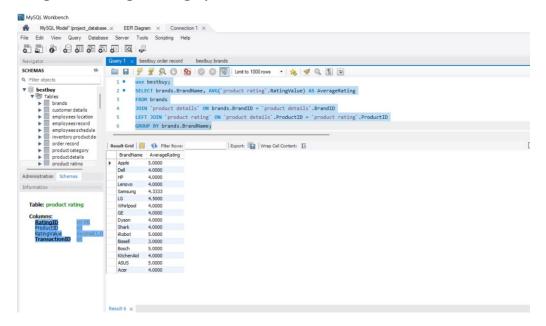**Insight 3: Most Expensive Product and its Brand:**

Insight 4: Ranking Products within Each Brand by Price:

Insight 5: Products with the Highest Ratings

Insight 6: Average Rating by Brand

Insight 7: Total Purchases per Location

Insight 8: Product Popularity by Brand

Insight 9: Average Salary by Position

```
use bestbuy;
SELECT Position, AVG(Salary) AS AvgSalary
FROM `employees record`
GROUP BY Position;
```

Position	AvgSalary
Manager	4750.0000
Software Eng	4775.0000
Marketing Spec	4350.0000
HR Manager	4950.0000
Senior Analyst	4750.0000
Analyst	4100.0000
Sales Rep	3533.3333
Marketing Coord	3850.0000

Insight 10: Most Common Shift Type

```
use bestbuy;
SELECT ShiftType, COUNT(ScheduleID) AS ShiftCount
FROM `employees schedule`
GROUP BY ShiftType
ORDER BY ShiftCount DESC
LIMIT 1;
```

ShiftType	ShiftCount
Day	12

Insight 11: Employees distribution by Location


```sql
1 ● use bestbuy;
2 ● SELECT el.Location, COUNT(er.EmployeeID) AS EmployeeCount
3   FROM `employees location` el
4   JOIN `employees record` er ON el.LocationID = er.LocationID
5   GROUP BY el.Location;
6
```

Location	EmployeeCount
NY	7
NJ	13

Insight12: Top salaried person in each location


```sql
1 ● use bestbuy;
2 ● SELECT Location, FirstName, LastName, Salary
3   FROM ( SELECT el.Location, FirstName, LastName, Salary,
4   ROW_NUMBER() OVER (PARTITION BY el.Location ORDER BY Salary DESC) AS SalaryRow
5   FROM `employees location` el
6   JOIN `employees record` er ON el.LocationID = er.LocationID
7   ) AS RankedData
8   WHERE SalaryRow = 1;
```

Location	FirstName	LastName	Salary
NJ	Emily	Davis	5000
NY	Sophia	Smith	5000

Insight 13: Salary Comparison based on Gender


```sql
use bestbuy;
SELECT Gender, AVG(Salary) AS AverageSalary, MAX(Salary) AS MaxSalary, MIN(Salary) AS MinSalary
FROM `employees record`
GROUP BY Gender;
```

Gender	AverageSalary	MaxSalary	MinSalary
Male	4120.0000	4800	3500
Female	4610.0000	5000	4000

Insight 14: Store-wise Inventory Count


```sql
use bestbuy;
SELECT st.StoreName, COUNT(ipd.InventoryID) AS ProductCount
FROM `store table` st
LEFT JOIN `inventory product details` ipd ON st.StoreID = ipd.StoreID
GROUP BY st.StoreName;
```

StoreName	ProductCount
Best Buy NYC1	2
Best Buy NYC2	2
Best Buy NYC3	2
Best Buy NYC4	1
Best Buy NYC5	1
Best Buy NYC6	1
Best Buy NYC7	1
Best Buy NYC8	1
Best Buy NYC9	1
Best Buy NYC10	1
Best Buy NJ1	1
Best Buy NJ2	1
Best Buy NJ3	1
Best Buy NJ4	1
Best Buy NJ5	1
Best Buy NJ6	1
Best Buy NJ7	1
Best Buy NJ8	0
Best Buy NJ9	0
Best Buy NJ10	0

Insight 15: Stores with Low Inventory (QuantityinStock < 50):

```
use bestbuy;
SELECT st.StoreName, ipd.ProductName, ipd.QuantityInStock
FROM `store table` st
JOIN `inventory product details` ipd ON st.StoreID = ipd.StoreID
WHERE ipd.QuantityInStock < 50;
```

StoreName	ProductName	QuantityInStock
Best Buy NYC3	Lenovo ThinkPad X1	30
Best Buy NYC6	Samsung Family Hub	40
Best Buy NYC7	Dyson V11	20
Best Buy NYC9	Roomba i7+	45
Best Buy NJ1	Bosch 800 Series	40
Best Buy NJ4	Iphone 15	30
Best Buy NJ6	HP Spectre x360	25
Best Buy NJ7	Lenovo ThinkPad X1	35

Insight 16: Rank Products Based on Quantity in Stock Within Each Store


```
1 • use bestbuy;
2 • SELECT st.StoreName, ipd.ProductName, ipd.QuantityInStock, RANK() OVER (PARTITION BY st.StoreID ORDER BY ipd.QuantityInStock DESC)
3   AS StockRank
4   FROM `store table` st
5   JOIN `inventory product details` ipd ON st.StoreID = ipd.StoreID;
```

StoreName	ProductName	QuantityInStock	StockRank
Best Buy NYC1	Iphone 15	100	1
Best Buy NYC1	Iphone 14	50	2
Best Buy NYC2	Dell XPS 13	75	1
Best Buy NYC2	HP Spectre x360	60	2
Best Buy NYC3	Samsung Galaxy Book	50	1
Best Buy NYC3	Lenovo ThinkPad X1	30	2
Best Buy NYC4	LG InstaView	80	1
Best Buy NYC5	Whirlpool French Door	60	1
Best Buy NYC6	Samsung Family Hub	40	1
Best Buy NYC7	Dyson V11	20	1
Best Buy NYC8	Shark Navigator Lift-...	90	1
Best Buy NYC9	Roomba i7+	45	1
Best Buy NYC10	Bissell CrossWave	70	1
Best Buy NJ1	Bosch 800 Series	40	1
Best Buy NJ2	LG QuadWash	55	1
Best Buy NJ3	Iphone 14	75	1
Best Buy NJ4	Iphone 15	30	1
Best Buy NJ5	Dell XPS 13	60	1
Best Buy NJ6	HP Spectre x360	25	1
Best Buy NJ7	Lenovo ThinkPad X1	35	1

Result 21

Insight 17: Running Total Quantity in Stock for Each Product Across All Stores


```
1 • use bestbuy;
2 • SELECT ipd.ProductName, st.StoreName, ipd.QuantityInStock, SUM(ipd.QuantityInStock)
3   OVER (PARTITION BY ipd.ProductName ORDER BY st.StoreID) AS RunningTotal
4   FROM `store table` st
5   JOIN `inventory product details` ipd ON st.StoreID = ipd.StoreID;
6
7
```

ProductName	StoreName	QuantityInStock	RunningTotal
Bissell CrossWave	Best Buy NYC10	70	70
Bosch 800 Series	Best Buy NJ1	40	40
Dell XPS 13	Best Buy NYC2	75	75
Dell XPS 13	Best Buy NJ5	60	135
Dyson V11	Best Buy NYC7	20	20
HP Spectre x360	Best Buy NYC2	60	60
HP Spectre x360	Best Buy NJ6	25	85
Iphone 14	Best Buy NYC1	50	50
Iphone 14	Best Buy NJ3	75	125
Iphone 15	Best Buy NYC1	100	100
Iphone 15	Best Buy NJ4	30	130
Lenovo ThinkPad...	Best Buy NYC3	30	30
Lenovo ThinkPad...	Best Buy NJ7	35	65
LG InstaView	Best Buy NYC4	80	80
LG QuadWash	Best Buy NJ2	55	55
Roomba i7+	Best Buy NYC9	45	45
Samsung Family ...	Best Buy NYC6	40	40
Samsung Galaxy ...	Best Buy NYC3	50	50
Shark Navigator ...	Best Buy NYC8	90	90
Whirlpool French ...	Best Buy NYC5	60	60

Result 23