Exploratory Data Analysis (EDA)

BASIC DATA EXPLOITATION WITH THE HELP OF AGGREGATED FUNCTIONS TO BETTER UNDERSTAND THE DATA FOR ANALYSIS.

Q:1 WHAT IS THE AVERAGE PRICE OF THE FOOD ITEMS AVAILABLE ON THE RESTAURANT'S MENU?

Query

```
Select avg(price) from managment_restaurnt.menu_items;
```

Answer Table

avg(price)
13.285937499999996

Q:2 HOW MANY TOTAL ORDERS HAVE BEEN PLACED AT THE RESTAURANT?

Query

```
Select count(order_id)
from managment_restaurnt.order_details;
```

Answer Table

count(order_id)
12097

Q:3 WHAT ARE THE MOST EXPENSIVE AND CHEAPEST DISHES AVAILABLE AT THE RESTAURANT?

Query

```
SELECT
    item_name,
    price
FROM
    managment_restaurnt.menu_items
ORDER BY
    price ASC
LIMIT 1;
```

Answer Table

item_name	price
Shrimp Scampi	19.95

Query

```
SELECT
    item_name,
    price
FROM
    managment_restaurnt.menu_items
ORDER BY
    price ASC
LIMIT 1;
```

Answer Table

item_name	price
Edamame	5

Q:4 WHAT ARE THE MOST EXPENSIVE AND CHEAPEST DISHES AVAILABLE AT THE RESTAURANT?

Query

```sql
SELECT
    item_name, price,
    COUNT(item_id) AS total_orders,
    SUM(price) AS total_revenue
FROM
    menu_items
JOIN
    order_details on item_id = item_id
GROUP BY
    item_name, price
ORDER BY
    total_revenue asc;
```

Answer Table

Result Grid | Filter Rows: | Export:

item_name	price	total_orders	total_revenue
Edamame	5	12097	60485
Chips & Salsa	7	12097	84679
French Fries	7	12097	84679
Mac & Cheese	7	12097	84679
Chips & Guacamole	9	12097	108873

Q:5 WHAT IS THE PROFITABILITY BREAKDOWN ACROSS DIFFERENT FOOD CATEGORIES?

```
Ans: select
category,
count(item_id) as total_orders,
sum(price) as total_revenue
from
menu_items
join
order_details on item_id
group by
category
order by
total_revenue desc
limit 4;
```

Query

category	total_orders	total_revenue
Italian	108873	1823622.749998136
Asian	96776	1304056.5999988127
Mexican	108873	1284701.399998243
American	72582	730658.7999998245

Answer Table