-- OBJECTIVE 1: EXPLORE THE MENU ITEMS TABLE

-- 1. View the menu_items table and write a query to find the number of items on the menu.

SELECT count(*)

FROM SYS.menu_items mi



-- 2. What are the least and most expensive items on the menu?

SELECT * FROM SYS.menu_items mi ORDER BY PRICE LIMIT 5

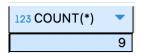
123 menu_item_id ▼	A-z item_name ▼	A-z category -	123 price 🔻
113	Edamame	Asian	5
122	Chips & Salsa	Mexican	7
105	Mac & Cheese	American	7
106	French Fries	American	7
103	Hot Dog	American	9

SELECT *
FROM SYS.menu_items mi
ORDER BY PRICE DESC
LIMIT 5

123 menu_item_id	A-z item_name 🔻	A-z category 🔻	123 price 🔻
130	Shrimp Scampi	Italian	19.95
127	Meat Lasagna	Italian	17.95
109	Korean Beef Bowl	Asian	17.95
110	Pork Ramen	Asian	17.95
125	Spaghetti & Meatbal	Italian	17.95

-- 3. How many Italian dishes are on the menu? What are the least and most expensive Italian dishes on the menu?

SELECT COUNT(*) FROM SYS.menu_items mi WHERE CATEGORY='Italian'



-- 4. How many dishes are in each category? What is the average dish price within each category? What's the most and least expensive?

SELECT category, COUNT(*) AS 'numberofdishes', round(AVG(price), 2) as
'Average price', MAX(price), MIN(PRICE)

FROM SYS.menu_items mi

GROUP BY category

A-z category	123 numberofdishes	•	123 Average price		123 MAX(price)	•	123 MIN(PRICE)	•
American		6	10.0	7	13	3.95		7
Asian		8	13.4	8	17	7.95		5
Mexican		9	11.8	8	14	1.95		7
Italian		9	16.7	5	19	9.95		14.5

-- OBJECTIVE 2: EXPLORE THE MENU ITEMS TABLE

-- 1. View the order_details table. What is the date range of the table?

SELECT *

FROM SYS.order_details od

SELECT MIN(ORDER_DATE), MAX(ORDER_DATE)

FROM SYS.order_details od

A-Z MIN(ORDER_DATE) ▼	A-Z MAX(ORDER_DATE)	
1/13/23	3/31/23	

-- 2. How many orders were made within this date range? How many items were ordered within this date range?

SELECT COUNT(DISTINCT ORDER ID)

FROM SYS.order details od



-- 3. Which orders had the most number of items?

SELECT COUNT(ITEM_ID), ORDER_ID

FROM SYS.order details od

GROUP BY order id

ORDER BY COUNT(item id) DESC

LIMIT 10

123 COUNT(ITEM_ID)	•	123 ORDER_ID
	14	2,675
	14	443
	14	1,957
	14	3,473
	14	330
	14	440
	14	4,305
	13	1,274
	13	2,126
	13	1,734

-- 4. How many orders had more than 12 items?

SELECT COUNT(*)

FROM (

SELECT ORDER_ID, COUNT(ITEM_ID)

FROM SYS.order_details od

GROUP BY order_id

HAVING COUNT(item_id)>12

) AS SUBQUERY_ALIAS

123 COUNT(*) **2**0

-- OBJECTIVE 3: ANALYZE CUSTOMER BEHAVIOR

-- 1. Combine the menu_items and order_details tables into a single table.

123 order_details_id	•	123 order_id	•	A-Z order_date	•	A-Z order_time	•	123 item_id 🔻	-	123 menu_item_id	•	A-Z item_name	A-Z category	•	123 price	•
	1		1	2001-01-23		11:38:36 AM		109	9		109	Korean Beef Bowl	Asian		17.	.95
	2		2	2001-01-23		11:57:40 AM		108	3		108	Tofu Pad Thai	Asian		1-	4.5
	3		2	2001-01-23		11:57:40 AM		124	4		124	Spaghetti	Italian		1-	4.5
	4		2	2001-01-23		11:57:40 AM		117	7		117	Chicken Burrito	Mexican		12	.95
	5		2	2001-01-23		11:57:40 AM		129	9		129	Mushroom Ravioli	Italian		1	5.5
	6		2	2001-01-23		11:57:40 AM		106	6		106	French Fries	American			7
	7		3	2001-01-23		12:12:28 PM		117	7		117	Chicken Burrito	Mexican		12	.95
	8		3	2001-01-23		12:12:28 PM		119	9		119	Chicken Torta	Mexican		11.	.95
	9		4	2001-01-23		12:16:31 PM		117	7		117	Chicken Burrito	Mexican		12	.95
	10		5	2001-01-23		12:21:30 PM		117	7		117	Chicken Burrito	Mexican		12	.95
	11		6	2001-01-23		12:29:36 PM		101	1		101	Hamburger	American		12	.95

-- 2. What were the least and most ordered items? What categories were they in?

SELECT COUNT(*) AS NUM_PURCHASES, ITEM_NAME, CATEGORY
FROM SYS.order_details od LEFT JOIN SYS.menu_items mi
 ON OD.item_id = MI.menu_item_id
GROUP BY ITEM_NAME, CATEGORY
ORDER BY count(*) DESC

123 NUM_PURCHASES ▼	A-Z ITEM_NAME ▼	A-Z CATEGORY ▼
622	Hamburger	American
620	Edamame	Asian
588	Korean Beef Bowl	Asian
583	Cheeseburger	American
571	French Fries	American
562	Tofu Pad Thai	Asian
489	Steak Torta	Mexican
470	Spaghetti & Meatballs	Italian
463	Mac & Cheese	American
461	Chips & Salsa	Mexican
456	Orange Chicken	Asian

-- 3. What were the top 5 orders that spent the most money?

```
SELECT ORDER_ID, SUM(PRICE)
FROM SYS.order_details od LEFT JOIN SYS.menu_items mi
     ON OD.item id = MI.menu item id
GROUP BY ORDER_ID
ORDER BY SUM(PRICE) DESC
LIMIT 5
```

123 ORDER_ID ▼	123 SUM(PRICE)
440	192.15
2,075	191.0 Co
1,957	190. Re
330	189.7
2,675	185.1

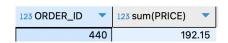
View the details of the highest spend order. Which specific items were purchased?

```
SELECT ORDER_ID, PRICE, CATEGORY, item_name
FROM SYS.order_details od LEFT JOIN SYS.menu_items mi
     ON OD.item_id = MI.menu_item_id
WHERE order_id = 440
ORDER BY PRICE DESC
```

-					
	123 ORDER_ID	•	123 PRICE 🔻	A-Z CATEGORY ▼	A-z item_name
Ì		440	17.95	Italian	Spaghetti & Meatballs
Ī		440	17.95	Italian	Spaghetti & Meatballs
		440	17.95	Asian	Korean Beef Bowl
		440	17.95	Italian	Meat Lasagna
		440	17.95	Italian	Chicken Parmesan
		440	16.95	Italian	Eggplant Parmesan
		440	14.5	Italian	Spaghetti
Ī		440	14.5	Italian	Fettuccine Alfredo
Ī		440	14.5	Italian	Fettuccine Alfredo
Ì		440	13.95	Mexican	Steak Tacos
		440	9	American	Hot Dog

-- 5. How much was the most expensive order

```
SELECT ORDER ID, sum(PRICE)
FROM SYS.order_details od LEFT JOIN SYS.menu_items mi
     ON OD.item_id = MI.menu_item_id
GROUP BY ORDER_ID
ORDER BY sum(PRICE) DESC
limit 1
```



5. View the details of the top 5 highest spend orders.

SELECT SUM(PRICE), CATEGORY, COUNT(menu_item_id)
FROM SYS.order_details od LEFT JOIN SYS.menu_items mi
 ON OD.item_id = MI.menu_item_id
WHERE order_id in (440, 2075, 1957, 330, 2675)
GROUP BY category
ORDER BY SUM(PRICE) DESC

123 SUM(PRICE)	A-Z CATEGORY ▼	123 count	•
430.65	Italian		26
228.65	Asian		17
189.45	Mexican		16
99.35	American		10