

# SQL Project Report

Dataset: Luxury Cosmetics Pop-Ups

## 1. Introduction

This project analyzes the Luxury Cosmetics Pop-Up Events Dataset using SQL. The dataset contains information about various cosmetic brand events held across cities and regions, including event details, sales data, footfall, and performance metrics.

### Dataset Overview

- Rows: ~200–300 (depending on data subset)
- Columns:
  - event\_id → Unique event identifier
  - brand → Cosmetics brand name
  - product\_name → Product sold at event
  - event\_type → Type of event (Flash Event, Shop-in-Shop, Standalone)
  - city → Event city
  - region → Event region (e.g., North America, Asia)
  - location\_type → Type of venue (Mall, High-Street, Department Store)
  - start\_date, end\_date → Event timeline
  - lease\_length\_days → Lease duration of event
  - price\_usd → Price of the product (USD)
  - units\_sold → Units sold during event
  - avg\_daily\_footfall → Average daily visitors
  - sell\_through\_pct → Percentage of inventory sold

## 2. Database Schema

Table: luxury\_cosmetics\_popups

-----	
event_id	INT PRIMARY KEY
brand	VARCHAR
product_name	VARCHAR
event_type	VARCHAR
city	VARCHAR
region	VARCHAR
location_type	VARCHAR

start\_date      DATE

end\_date        DATE

lease\_length\_days INT

price\_usd        DECIMAL

units\_sold       INT

avg\_daily\_footfall INT

sell\_through\_pct DECIMAL

### 3. SQL Queries with Explanations

✓ Basic Queries

#### 1. Retrieve all pop-up events hosted in New York

```
SELECT
*
FROM
luxury_cosmetics_popups
WHERE
city = 'New York';
```

event_id	brand	region	city	location_type	event_type	start_date	end_date	lease_length_days	sku	product_name	price_usd	avg_dail
POP102014	Valentino Beauty	North America	New York	Airport Duty-Free	Flash Event	2024-03-17	2024-06-09	84	LE-9E9FTDSM	Valentino Beauty Pearl Eyeshadow Palette	77.93	1652
POP100464	Guerlain	North America	New York	Luxury Mall	Shop-in-Shop	2024-06-14	2024-07-06	22	LE-C4LL9SDQ	Guerlain Satin Mascara	61.69	1725
POP101444	Fenty Beauty	North America	New York	Art/Design District	Mall Kiosk	2024-11-13	2024-11-18	5	LE-VNQSL8WX	Fenty Beauty Mirage Serum	86.35	939
POP101442	Hourglass	North America	New York	High-Street	Mall Kiosk	2024-08-02	2024-09-03	32	LE-9IVYG0SS	Hourglass Â%odot Highlighter	85.93	904
POP100650	Fenty Beauty	North America	New York	Department Store Atrium	Mobile Pop-Up Truck	2024-10-18	2024-12-26	69	LE-94HLK076	Fenty Beauty Velvet Primer	47.53	1655
POP101629	Tom Ford Beauty	North America	New York	Department Store Atrium	Mall Kiosk	2025-02-24	2025-03-30	34	LE-6582YCV2	Tom Ford Beauty Velvet Mascara	36.65	681
POP101868	Hourglass	North America	New York	Department Store Atrium	Standalone Pop-Up	2025-06-25	2025-08-07	43	LE-1MASM2F0	Hourglass Satin Foundation	106.84	1274
POP101933	Pat McGrath Labs	North America	New York	Luxury Mall	Standalone Pop-Up	2024-11-06	2024-11-18	12	LE-08BP153K	Pat McGrath Labs Noir Mascara	46.37	1876
POP101512	Huda Beauty	North America	New York	Airport Duty-Free	Shop-in-Shop	2024-12-16	2025-02-19	65	LE-4PCPFQ6K	Huda Beauty Opulence Mascara	45.18	1230
POP101273	Bobbi Brown	North America	New York	Luxury Mall	Mall Kiosk	2025-01-04	2025-02-24	51	LE-WDZ4TB1V	Bobbi Brown Glow Serum	189.44	1985

2. Show the brand and product\_name for items priced above 100 USD

```
SELECT
    brand, product_name, price_usd
FROM
    luxury_cosmetics_popups
WHERE
    price_usd > 100;
```

Result Grid				Filter Rows:		Export:	Wrap Cell Conte
	brand	product_name	price_usd				
►	YSL Beauty	YSL Beauty Glow Eyeshadow Palette	149.91				
	Armani Beauty	Armani Beauty Glow Fragrance	118.17				
	YSL Beauty	YSL Beauty Mirage Fragrance	316.49				
	Chanel	Chanel ����at Fragrance	211.05				
	Sisley-Paris	Sisley-Paris Noir Foundation	119.54				
	Armani Beauty	Armani Beauty Opulence Serum	232.34				
	Herm��s Beauty	Herm��s Beauty Opulence Eyeshadow Palette	115.29				
	Valentino Beauty	Valentino Beauty ����at Eyeshadow Palette	149.86				
	Chanel	Chanel Glow Serum	170.29				
	Est��e Lauder	Est��e Lauder Opulence Eyeshadow Palette	105.04				

3. List all events where event\_type = 'Flash Event'

```
SELECT
*
FROM
luxury_cosmetics_popups
WHERE
event_type = 'Flash Event';
```

Result Grid													
Filter Rows:													
Export:													
Wrap Cell Contents:													
Fetch rows:													
event_id	brand	region	city	location_type	event_type	start_date	end_date	lease_length_days	sku	product_name	price_usd	avg_daily_footfall	
POP100282	Charlotte Tilbury	North America	Miami	Art/Design District	Flash Event	2024-02-25	2024-03-02	6	LE-UQYNQA1A	Charlotte Tilbury Glow Mascara	62.21	1107	
POP102014	Valentino Beauty	North America	New York	Airport Duty-Free	Flash Event	2024-03-17	2024-06-09	84	LE-9E9FTDSM	Valentino Beauty Pearl Eyeshadow Palette	77.93	1652	
POP100921	La Prairie	North America	Miami	Department Store Atrium	Flash Event	2024-03-08	2024-04-06	29	LE-YBK5QA4S	La Prairie Glow Mascara	42.61	921	
POP100109	Bobbi Brown	Latin America	Lima	Art/Design District	Flash Event	2025-03-31	2025-06-07	68	LE-K4E6KSXV	Bobbi Brown Glow Highlighter	51.55	621	
POP100342	La Prairie	North America	Miami	Luxury Mall	Flash Event	2024-04-06	2024-04-23	17	LE-1VMHOQLW	La Prairie Á%dat Lipstick	39.38	1606	
POP100818	Chanel	Asia-Pacific	Shanghai	Department Store Atrium	Flash Event	2024-07-04	2024-09-06	64	LE-DPH63DMG	Chanel Glow Serum	170.29	1605	
POP101786	Rare Beauty	Europe	London	Art/Design District	Flash Event	2024-10-31	2024-12-25	55	LE-J9NDXMMML	Rare Beauty Velvet Highlighter	85.35	1220	
POP100471	Shiseido	Asia-Pacific	Singapore	Art/Design District	Flash Event	2024-02-23	2024-04-04	41	LE-T4BSKLWB	Shiseido Glow Mascara	73.49	758	
POP100420	NARS	Latin America	Bogotá	Art/Design District	Flash Event	2025-01-28	2025-03-01	32	LE-1V3EXMI8	NARS Pearl Highlighter	79.94	642	
POP101531	Estée Lauder	Europe	Paris	High-Street	Flash Event	2025-02-11	2025-04-09	57	LE-DGE3JZQT	Estée Lauder Lumière Fragrance	142.88	1814	

4. Find the top 5 most expensive products

```
SELECT
    brand, product_name, price_usd
FROM
    luxury_cosmetics_popups
ORDER BY price_usd DESC
LIMIT 5;
```

Result Grid				Filter Rows:		Export:	Wrap Cell C
	brand	product_name	price_usd				
▶	Hourglass	Hourglass Satin Fragrance	396.49				
	Tom Ford Beauty	Tom Ford Beauty Velvet Fragrance	395.26				
	La Prairie	La Prairie Á%¸dat Fragrance	394.1				
	Sisley-Paris	Sisley-Paris Pearl Fragrance	391.91				
	EstÃ©e Lauder	EstÃ©e Lauder Mirage Fragrance	391.4				

## 5. Count how many events were held in each region

**SELECT**



region, COUNT(\*) AS total\_events

**FROM**

luxury\_cosmetics\_popups

**GROUP BY** region

**ORDER BY** total\_events **DESC**;

Result Grid				 Filter Rows:	
	region	total_events			
▶	Latin America	459			
	Asia-Pacific	429			
	Europe	428			
	Middle East	418			
	North America	399			

## ◆ Intermediate Queries

6. Calculate the total revenue (price\_usd \* units\_sold) for each brand

```
SELECT
    brand, SUM(price_usd * units_sold) AS total_revenue
FROM
    luxury_cosmetics_popups
GROUP BY brand
ORDER BY total_revenue DESC;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Cont
	brand	total_revenue		
▶	Estée Lauder	20959740.749999996		
	YSL Beauty	20394405.87		
	Sisley-Paris	19017497.29000001		
	Hourglass	18755973.53		
	Rare Beauty	18731476.959999997		
	Chanel	18028914.89		
	MAC Cosmetics	17970144.46		
	Clé de Peau Beauté	17931358.849999994		
	Valentino Beauty	17453900.28000001		
	Pat McGrath Labs	17208066.450000003		





7. Find the average lease length for events by location\_type

```
SELECT
    location_type, AVG(lease_length_days) AS avg_lease_length
FROM
    luxury_cosmetics_popups
GROUP BY location_type
ORDER BY avg_lease_length DESC;
```

Result Grid			Filter Rows:		Export:
	location_type	avg_lease_length			
▶	High-Street	48.1805			
	Luxury Mall	47.2442			
	Airport Duty-Free	46.5829			
	Art/Design District	46.2154			
	Department Store Atrium	45.5142			



## 8. Show the city with the highest average daily footfall

```
SELECT
    city, AVG(avg_daily_footfall) AS avg_footfall
FROM
    luxury_cosmetics_popups
WHERE
    city IS NOT NULL
GROUP BY city
ORDER BY avg_footfall DESC
LIMIT 1;
```

Result Grid   Filter Rows: _____		
	city	avg_footfall
▶	Los Angeles	1527.1250

9. Get the top 3 brands by total units\_sold

```
SELECT
    brand, SUM(units_sold) AS total_units
FROM
    luxury_cosmetics_popups
GROUP BY brand
ORDER BY total_units DESC
LIMIT 3;
```

Result Grid   Filter Rows:

	brand	total_units
▶	Huda Beauty	200456
	YSL Beauty	200454
	ClÃ© de Peau BeautÃ©	197276

10. List events where sell\_through\_pct is below 70%





```
SELECT
    event_id, brand, product_name, sell_through_pct
FROM
    luxury_cosmetics_popups
WHERE
    sell_through_pct < 70;
```

Result Grid				
Filter Rows:		Export:		
Wrap Cell Content:		Fetch rows:		
event_id	brand	product_name	sell_through_pct	
POP101719	YSL Beauty	YSL Beauty Glow Eyeshadow Palette	69.18	
POP100994	Hermès Beauty	Hermès Beauty Pearl Highlighter	66.78	
POP100297	Givenchy Beauty	Givenchy Beauty Opulence Lipstick	57.73	
POP101590	Rare Beauty	Rare Beauty Lumière Setting Powder	56.31	
POP100290	Estée Lauder	Estée Lauder Mirage Highlighter	61.17	
POP102026	Charlotte Tilbury	Charlotte Tilbury Opulence Eyeshadow Palette	66.9	
POP100507	Givenchy Beauty	Givenchy Beauty Noir Eyeshadow Palette	60.89	
POP100450	YSL Beauty	YSL Beauty Mirage Fragrance	60.67	
POP101795	NARS	NARS Lumière Highlighter	62.99	
POP100109	Bobbi Brown	Bobbi Brown Glow Highlighter	63.9	

## Advanced Queries

### 11. Using a window function, rank brands by total revenue in each region

```
SELECT region, brand, SUM(price_usd * units_sold) AS total_revenue,  
       RANK() OVER (PARTITION BY region ORDER BY SUM(price_usd * units_sold) DESC) AS revenue_rank  
FROM luxury_cosmetics_popups  
GROUP BY region, brand;
```

Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 				
	region	brand	total_revenue	revenue_rank
▶	Asia-Pacific	ClÃ© de Peau BeautÃ©	5892313.89	1
	Asia-Pacific	Hourglass	4766049.58	2
	Asia-Pacific	La Prairie	4076906	3
	Asia-Pacific	Armani Beauty	4042120.3699999996	4
	Asia-Pacific	EstÃ©e Lauder	3664379.0300000003	5
	Asia-Pacific	Pat McGrath Labs	3338052.6300000004	6
	Asia-Pacific	Tom Ford Beauty	3317980.099999999	7
	Asia-Pacific	Givenchy Beauty	3091646.7200000007	8
	Asia-Pacific	Shiseido	2989925.5200000005	9
	Asia-Pacific	Fenty Beauty	2970530.83	10
	Asia-Pacific	Charlotte Tilbury	2941491.3499999996	11
	Asia-Pacific	HermÃ's Beauty	2775463.4599999995	12

12. Find the moving average of daily footfall (per region, ordered by date)

```
SELECT region, start_date, avg_daily_footfall,
       AVG(avg_daily_footfall) OVER (
         PARTITION BY region
         ORDER BY start_date
         ROWS BETWEEN 2 PRECEDING AND CURRENT ROW
       ) AS moving_avg_footfall
FROM luxury_cosmetics_popups;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	region	start_date	avg_daily_footfall	moving_avg_footfall
▶	Asia-Pacific	2024-02-19	2570	2570.0000
	Asia-Pacific	2024-02-19	723	1646.5000
	Asia-Pacific	2024-02-20	479	1257.3333
	Asia-Pacific	2024-02-20	2457	1219.6667
	Asia-Pacific	2024-02-23	758	1231.3333
	Asia-Pacific	2024-02-27	1131	1448.6667
	Asia-Pacific	2024-02-29	560	816.3333
	Asia-Pacific	2024-03-01	1045	912.0000
	Asia-Pacific	2024-03-04	1598	1067.6667
	Asia-Pacific	2024-03-04	2574	1739.0000
	Asia-Pacific	2024-03-04	1120	1764.0000
	Asia-Pacific	2024-03-04	767	1487.0000

## 5. Sample Outputs (Screenshots)

- Screenshot of query execution (MySQL)
- Result tables (e.g., Top 5 Brands, Highest Revenue City).

## 6. Conclusion

- This SQL analysis reveals that some brands generate higher revenue from Flash Events compared to Shop-in-Shop models. High-street locations provide more footfall, but sell-through % is higher in malls. Advanced SQL queries provide insight into profitability by brand and product.

## 7. References

- Dataset: luxury\_cosmetics\_popups.csv
- Tool: MySQL