WALMART
SALES ANALYSIS

SAVE MONEY. LIVE BETTER.

INTRODUCTION

This exploring key insights, including top-selling cities, product lines, monthly revenue, branch gender distribution, gross income, and total profit. These insights aim to provide actionable data for strategic decision-making and operational enhancement.

Walmart

```sql
CREATE DATABASE  walmartsales;

CREATE TABLE  wsales(
invoice_id varchar(30) primary key,
branch varchar(5) not null,
city  varchar(30) not null,
customer_type varchar(30) not null,
gender varchar(10) not null,
product_line varchar(100) not null,
unit_price decimal(10,2) not null,
quantity int not null,
VAT float(6,4) not null,
total decimal(12,4) not null,
date datetime not null,
time time not null,
payment_method varchar(15) not null,
cogs decimal(10,2) not null,
gross_margin_pct float(11,9),
gross_income decimal(12,4) not null,
rating float(2,1));
```

```sql
SELECT
    time,
  (CASE
        WHEN `time` BETWEEN "00:00:00" AND "12:00:00" THEN
"Morning"
        WHEN `time` BETWEEN "12:01:00" AND "16:00:00" THEN
"Afternoon"
        ELSE "Evening"
    END
    ) as time_of_date
FROM wsales;

 ALTER TABLE wsales ADD COLUMN time_of_day VARCHAR(20);
```
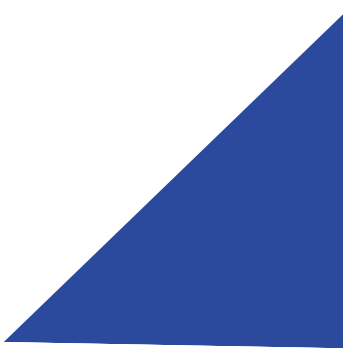
```sql
UPDATE wsales
    SET time_of_day=(CASE
        WHEN `time` BETWEEN "00:00:00" AND "12:00:00" THEN
"Morning"
        WHEN `time` BETWEEN "12:01:00" AND "16:00:00" THEN
"Afternoon"
        ELSE "Evening"
    END);

SELECT
    date,
    DAYNAME(date) AS day_name
FROM wsales;
```

```sql
ALTER TABLE wsales ADD COLUMN day_name VARCHAR(10);

UPDATE  wsales
SET day_name=DAYNAME(date);


SELECT
    date,
    MONTHNAME(date) AS month_name
FROM wsales;
```
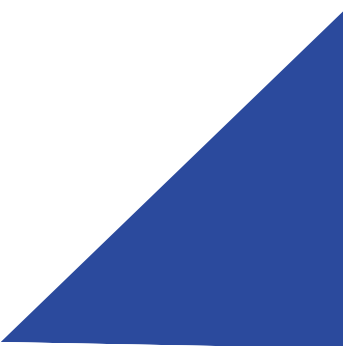
```
ALTER TABLE wsales ADD COLUMN month_name VARCHAR(10);

UPDATE wsales
SET  month_name=MONTHNAME(date);
```

Q1

HOW MANY UNIQUE CITIES DOES THE DATA HAVE?

SELECT DISTINCT CITY FROM WSALES;
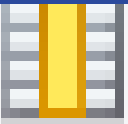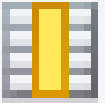
city
▶ Yangon
Naypyitaw
Mandalay

Q2

FIND PRODUCT_LINE WITH TOTAL PROFIT GREATER THAN 1000?

SELECT PRODUCT_LINE ,
SUM(TOTAL)AS TOTAL
FROM WSALES GROUP BY PRODUCT_LINE
HAVING TOTAL> 50000;

	product_line	total
▶	Food and beverages	56144.8440
	Sports and travel	53936.1270
	Fashion accessories	54305.8950
	Home and lifestyle	53861.9130
	Electronic accessories	53783.2365

Result Grid | Filter Rows:

WRITE A QUERY TO SHOW TOTAL GROSS INCOME ?

SELECT ROUND(SUM(GROSS_INCOME),2)AS TOTAL_GROSS_INCOME
 FROM WSALES;

total_gross_income
15280.30

Q4

WHAT IS THE GENDER DISTRIBUTION PER BRANCH?

SELECT BRANCH,
GENDER,
COUNT(*) AS COUNT
FROM WSALES
GROUP BY BRANCH,GENDER;

	branch	gender	count
▶	A	Male	179
	C	Female	177
	C	Male	150
	B	Female	160
	B	Male	169
	A	Female	160

Result Grid | Filter Row

Q5

WRITE A QUERY TO SHOW THE GROSS INCOME FOR THE MONTH OF JANUARY ?

SELECT MONTH_NAME,SUM(GROSS_INCOME) AS TOTAL_INCOME
FROM WSALES
WHERE MONTH_NAME="JANUARY";

Result Grid	Filter Rows:	
	month_name	total_income
▶	January	5537.7080

Q6

SELECT ALL THE DATA FROM DATABASE FOR THE PRODUCT_LINEFOOD AND BEVERAGES & HOME AND LIFESTYLE?

SELECT * FROM WSALES
WHERE PRODUCT_LINE IN('FOOD AND BEVERAGES','HOME AND LIFESTYLE');

invoice_id	branch	city	customer_type	gender	product_line	unit_price	quantity	VAT
101-17-6199	A	Yangon	Normal	Male	Food and beverages	45.79	7	16.0265
106-35-6779	A	Yangon	Member	Male	Home and lifestyle	44.34	2	4.4340
110-05-6330	C	Naypyitaw	Normal	Female	Food and beverages	39.43	6	11.8290
118-62-1812	C	Naypyitaw	Member	Female	Home and lifestyle	78.38	4	15.6760
120-54-2248	B	Mandalay	Normal	Female	Food and beverages	28.86	5	7.2150
126-54-1082	A	Yangon	Member	Female	Home and lifestyle	21.54	9	9.6930
130-67-4723	A	Yangon	Member	Male	Food and beverages	48.50	6	14.5500
131-15-8856	C	Naypyitaw	Member	Female	Food and beverages	72.52	8	29.0080
135-13-8269	B	Mandalay	Member	Female	Food and beverages	78.88	2	7.8880
136-08-6195	A	Yangon	Normal	Female	Home and lifestyle	69.96	8	27.9840
138-17-5109	A	Yangon	Member	Female	Home and lifestyle	89.21	9	40.1445

Q7

WHAT IS THE MOST SELLING PRODUCT LINE?

SELECT PRODUCT_LINE,
COUNT(PRODUCT_LINE) AS PRODUCT_COUNT
FROM WSALES
GROUP BY PRODUCT_LINE
ORDER BY PRODUCT_COUNT DESC;

Result Grid | Filter Rows:

product_line	product_count
Fashion accessories	178
Food and beverages	174
Electronic accessories	169
Sports and travel	163
Home and lifestyle	160
Health and beauty	151

Q8

WHAT IS THE TOTAL REVENUE BY MONTH?

SELECT MONTH_NAME AS MONTH,
ROUND(SUM(TOTAL),2)AS TOTAL_REVENUE
FROM WSALES
GROUP BY MONTH;

month	total_revenue
March	108867.15
January	116291.87
February	95727.38

Q4 FETCH EACH PRODUCT LINE AND ADD A COLUMN TO THOSE PRODUCT LINE SHOWING "GOOD", "BAD".GOOD IF ITS GREATER THAN AVERAGE SALES */

```
SELECT PRODUCT_LINE,
    CASE
        WHEN TOTAL > (SELECT AVG(TOTAL) FROM WSALES) THEN 'GOOD'
        ELSE 'BAD'
    END AS PERFORMANCE
FROM WSALES;
```

product_line	performance
Food and beverages	Good
Health and beauty	Bad
Sports and travel	Bad
Health and beauty	Good
Fashion accessories	Bad
Sports and travel	Good
Home and lifestyle	Bad
Fashion accessories	Good
Sports and travel	Good

Q10

WHICH OF THE CUSTOMER TYPES BRINGS THE MOST REVENUE?
SELECT CUSTOMER_TYPE,
SUM(TOTAL) AS REVENUE
FROM WSALES
GROUP BY CUSTOMER_TYPE
ORDER BY REVENUE DESC ;

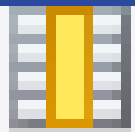|	customer_type	revenue
▶	Member	163625.1015
	Normal	157261.2930

Q11

WHICH CITY HAS THE LARGEST TAX PERCENT/ VAT (VALUE ADDED TAX)?

SELECT CITY,
AVG(VAT) AS AVG_VAT
FROM WSALES
GROUP BY CITY
ORDER BY AVG_VAT DESC;

city	avg_VAT
Naypyitaw	16.09010850
Mandalay	15.13020824
Yangon	14.87020798

Q12

WHAT IS THE MOST COMMON CUSTOMER TYPE?

SELECT CUSTOMER_TYPE, COUNT(*) AS FREQUENCY
FROM WSALES
GROUP BY CUSTOMER_TYPE
ORDER BY FREQUENCY DESC
LIMIT 1;

Result Grid	Filter Rows:		
	customer_type	frequency
▶	Member	499

Q13

WHICH TIME OF THE DAY DO CUSTOMERS GIVE MOST RATINGS?

```
SELECT TIME_OF_DAY,
COUNT(RATING) AS RATING_COUNT
FROM WSALES
GROUP BY TIME_OF_DAY
ORDER BY RATING_COUNT DESC
LIMIT 1;
```

	time_of_day	rating_count
▶	Evening	429