SALES ANALYSIS WITH SQL

```
EXEC SP_SPACEUSED [ALL_DATA];
```

	name	rows	reserved	data	index_size	unused
1	all_data	185950	48656 KB	45832 KB	8 KB	2816 KB

```
SELECT * FROM [ALL_DATA]
DELETE FROM [ALL_DATA] WHERE ORDER_ID IS NULL
OR PRODUCT IS NULL OR QUANTITY_ORDERED IS NULL
OR PRICE_EACH IS NULL OR ORDER_DATE IS NULL
OR PURCHASE_ADDRESS IS NULL;

-- SALES BY MONTH
SELECT DATENAME(MONTH, ORDER_DATE) AS MONTH,
FORMAT (ROUND (SUM(QUANTITY_ORDERED * PRICE_EACH), 2), 'N2') AS MONTHLY_TOTAL_SALES
FROM ALL_DATA GROUP BY DATENAME(MONTH, ORDER_DATE) ORDER BY SUM(QUANTITY_ORDERED *
PRICE_EACH) DESC;
```

	Month	Monthly_Total_Sales
1	December	4,613,443.32
2	October	3,736,726.86
3	April	3,390,670.22
4	November	3,199,603.18
5	May	3,152,606.73
6	March	2,807,100.37
7	July	2,647,775.75
8	June	2,577,802.25
9	August	2,244,467.87
10	February	2,202,022.41
11	September	2,097,560.12
12	January	1,822,256.72

```
--SALES BY CITY
ALTER TABLE [ALL_DATA] ADD  CITY VARCHAR (50);
UPDATE [ALL_DATA] SET
            CITY = TRIM(SUBSTRING(PURCHASE_ADDRESS,
            CHARINDEX(',', PURCHASE_ADDRESS) + 1, CHARINDEX(',', PURCHASE_ADDRESS,
CHARINDEX(',', PURCHASE_ADDRESS) + 1) -
                    CHARINDEX(',', PURCHASE_ADDRESS) - 1));
SELECT CITY AS CITY,
FORMAT (ROUND (SUM(QUANTITY_ORDERED * PRICE_EACH), 2), 'N2') AS CITY_TOTAL_SALES
FROM ALL_DATA GROUP BY CITY ORDER BY SUM(QUANTITY_ORDERED * PRICE_EACH) DESC;
```

	City	City_Total_Sales
1	San Francisco	8,262,203.87
2	Los Angeles	5,452,570.77
3	New York City	4,664,317.41
4	Boston	3,661,641.99
5	Atlanta	2,795,498.57
6	Dallas	2,767,975.39
7	Seattle	2,747,755.47
8	Portland	2,320,490.60
9	Austin	1,819,581.74

```sql
-- SALES BY PRODUCT
SELECT PRODUCT AS PRODUCT,
FORMAT (ROUND (SUM(QUANTITY_ORDERED * PRICE_EACH), 2), 'N2') AS PRODUCT_TOTAL_SALES
FROM ALL_DATA GROUP BY PRODUCT ORDER BY SUM(QUANTITY_ORDERED * PRICE_EACH) DESC;
```

	Product	Product_Total_Sales
1	Macbook Pro Laptop	8,037,600.00
2	iPhone	4,794,300.00
3	ThinkPad Laptop	4,129,958.66
4	Google Phone	3,319,200.00
5	27in 4K Gaming Monitor	2,435,097.50
6	34in Ultrawide Monitor	2,355,557.95
7	Apple Airpods Headphones	2,349,150.00
8	Flatscreen TV	1,445,700.00
9	Bose SoundSport Headphones	1,345,565.40
10	27in FHD Monitor	1,132,424.54
11	Vareebadd Phone	827,200.00
12	20in Monitor	454,148.70
13	LG Washing Machine	399,600.00
14	LG Dryer	387,600.00
15	Lightning Charging Cable	347,094.15
16	USB-C Charging Cable	286,501.25
17	Wired Headphones	246,478.43
18	AA Batteries (4-pack)	106,118.40
19	AAA Batteries (4-pack)	92,740.83

```sql
--SALES BY HOUR (BEST HOUR TO MAKE AN ADVERT)
SELECT DATEPART(HOUR, ORDER_DATE) AS HOUR,
FORMAT (COUNT(*), 'N0') AS HOUR_COUNT
FROM [ALL_DATA] GROUP BY DATEPART(HOUR, ORDER_DATE) ORDER BY COUNT(*) DESC;
```

	Hour	Hour_Count
1	19	12,905
2	12	12,587
3	11	12,411
4	18	12,280
5	20	12,228
6	13	12,129
7	14	10,984
8	10	10,944
9	21	10,921
10	17	10,899
11	16	10,384
12	15	10,175
13	22	8,822
14	9	8,748
15	23	6,275
16	8	6,256
17	7	4,011
18	0	3,910
19	6	2,482
20	1	2,350
21	5	1,321
22	2	1,243
23	4	854
24	3	831