SALES ANALYSIS

- Total Sales
- Product-Wise Total Sales
- Year-wise Total Sales
- Total Sales by Years and Products
- %Change in Year-Year Sales
- Total Sales and Previous Year Sales comparison by Product-Category
- Total Sales and Previous Year Sales by Product-Category and %Change Total Sales by Product
- Total Quantity Sold
- Category-wise Product Sold
- Category-wise and Year-wise Quantity Sold
- Total Quantity Sold and Previous Year Quantity Sold comparison by category
- %Change in Quantity Sold Year by Year Category -wise
- Year- Year Quan Sold and % Change in Quantity Sold
- Total Orders
- Total Orders by Product
- Total Orders by Product and Year
- Total Orders by Product and Year and Difference in Sales Year-Year
- % change in Total Orders Year-Year
- Total Sales by Deal-Size
- Total Sales, Total Orders and Total Quantity Sold by Deal-Size
- Details of Order Status
- Total Shipped Orders and Total Quantity
- Total Disputed Orders and Total Quantity
- Total Cancelled Orders and Total Quantity
- Total Hold-on Orders and Total Quantity
- Total In-Process Orders and Total Quantity
- Total Resolved Orders and Total Quantity
- Top 10 Customers with Highest Sales
- Bottom 10 Customers with Highest Sales
- Top 10 Countries with Total Sales
- Bottom 10 Countries with Total Sales
- Territory Wise Total Sales
- Total Sales by Month and Respective Year
- Running Sales Total and Respective Year
- Month to Month % Change in Sales in respective Years

MY SQL QUERIES

SAMPLE SALES ANALYSIS

CREATE DATABASE sales_data;

USE sales_data;

DESC sales_table ;

					_
Field	Type	Null	Key	Default	Extra
i»¿ORDERNUMBER	int	YES		NULL	
QUANTITYORDERED	int	YES		NULL	
PRICEEACH	double	YES		NULL	
ORDERLINENUMBER	int	YES		NULL	
SALES	double	YES		NULL	
ORDERDATE	text	YES		NULL	
STATUS	text	YES		NULL	
QTR_ID	int	YES		NULL	
MONTH_ID	int	YES		NULL	
YEAR_ID	int	YES		NULL	
PRODUCTLINE	text	YES		NULL	
MSRP	int	YES		NULL	
PRODUCTCODE	text	YES		NULL	
CUSTOMERNAME	text	YES		NULL	
PHONE	text	YES		NULL	
ADDRESSLINE1	text	YES		NULL	
ADDRESSLINE2	text	YES		NULL	
CITY	text	YES		NULL	
STATE	text	YES		NULL	
POSTALCODE	text	YES		NULL	
COUNTRY	text	YES		NULL	
TERRITORY	text	YES		NULL	
CONTACTLASTNAME	text	YES		NULL	
CONTACTFIRSTNAME	text	YES		NULL	
DEALSIZE	text	YES		NULL	

CONVERTING ORDER_DATE TO CORRECT DATE FORMAT

UPDATE sales_table

SET ORDERDATE = DATE(STR_TO_DATE(ORDERDATE, '%d-%m-%Y 0:00'));

ALTER TABLE sales_table

MODIFY COLUMN Orderdate DATE;

RENAMING COLUMN NAME

ALTER TABLE sales_table

RENAME COLUMN i»¿ORDERNUMBER TO ORDERNUMBER;

DESC sales_table;



SALES ANALYSIS

TOTAL SALES

SELECT ROUND(SUM(sales) over()) AS Total_sales

FROM

sales_table;



PRODUCT-WISE TOTAL SALES

SELECT productline,

ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY productline

ORDER BY Total_Sales DESC;

productline	Total_Sales
Classic Cars	3919616
Vintage Cars	1903151
Motorcycles	1166388
Trucks and Buses	1127790
Planes	975004
Ships	714437
Trains	226243

PRODUCT-WISE TOTAL SALES AND TOTAL PRODUCT CATEGORIES

SELECT productline,

ROUND(SUM(sales)) AS Total_Sales,

(SELECT COUNT(DISTINCT productline) FROM sales_table) AS TOTAL_PRODUCTS

FROM

sales_table

GROUP BY productline

ORDER BY Total_Sales DESC;

productline	Total_Sales	TOTAL_PRODUCTS
Classic Cars	3919616	7
Vintage Cars	1903151	7
Motorcycles	1166388	7
Trucks and Buses	1127790	7
Planes	975004	7
Ships	714437	7
Trains	226243	7

TOTAL SALES BY YEARS

SELECT year_id,

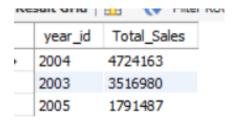
ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY year_id

ORDER BY Total_Sales DESC;



TOTAL SALES BY YEARS AND ALSO BY PRODUCT WISE

SELECT productline, year_id,

ROUND(SUM(sales)) AS Totak_Sales

FROM

sales_table

GROUP BY productline, year_id

ORDER BY productline, year_id;

productline	year_id	Totak_Sales
Classic Cars	2003	1484785
Classic Cars	2004	1762257
Classic Cars	2005	672573
Motorcycles	2003	370896
Motorcycles	2004	560545
Motorcycles	2005	234948
Planes	2003	272258
Planes	2004	502672
Planes	2005	200074
Ships	2003	244821
Ships	2004	341438
Ships	2005	128178
Trains	2003	72802
Trains	2004	116524
Trains	2005	36917
Trucks and	2003	420430
Trucks and	2004	529303
Trucks and	2005	178057
Vintage Cars	2003	650988
Vintage Cars	2004	911424
Vintage Cars	2005	340739

YEAR TO YEAR % CHANGE IN TOTAL SALES

SELECT year_id, ROUND(SUM(sales)) AS Total_Sales,

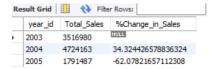
(SUM(sales) - LAG(SUM(sales),1) OVER (ORDER BY year_id))/

LAG(SUM(sales),1) OVER (ORDER BY year_id)*100 AS '%Change_in_Sales'

FROM sales_table

GROUP BY year_id

ORDER BY year id;



TOTAL SALES AND PREVIOUS YEAR SALES BY CATEGORY

SELECT productline, year_id,

ROUND(SUM(sales)) AS Total_Sales,

ROUND(LAG(SUM(sales)) OVER (PARTITION BY productline ORDER BY year_id)) AS Previous_Year_Sales

FROM

sales_table

GROUP BY productline, year_id



YEAR TO YEAR % CHANGE IN TOTAL SALES BY CATEGORY

WITH sales AS (SELECT productline, year_id,

ROUND(SUM(sales)) AS Total_Sales,

ROUND(LAG(SUM(sales)) OVER (PARTITION BY productline ORDER BY year_id)) AS Previous_Year_Sales

FROM

sales_table

GROUP BY productline, year_id

ORDER BY productline, year_id)

SELECT productline, year_id,

Total_Sales,

Previous_Year_Sales,

ABS(ROUND((1 - Total_Sales / Previous_Year_Sales) * 100,2)) AS '% Change_in_Sales'

FROM sales;

productline	year_id	Total_Sales	Previous_Year_Sales	% Change_in_Sales
Classic Cars	2003	1484785	NULL	NULL
Classic Cars	2004	1762257	1484785	18.69
Classic Cars	2005	672573	1762257	61.83
Motorcycles	2003	370896	NULL	NULL
Motorcycles	2004	560545	370896	51.13
Motorcycles	2005	234948	560545	58.09
Planes	2003	272258	NULL	NULL
Planes	2004	502672	272258	84.63
Planes	2005	200074	502672	60.2
Ships	2003	244821	NULL	NULL
Ships	2004	341438	244821	39.46
Ships	2005	128178	341438	62.46
Trains	2003	72802	NULL	NULL
Trains	2004	116524	72802	60.06
Trains	2005	116524	116524	68.32
Trucks and	2003	420430	NULL	NULL
Trucks and	2004	529303	420430	25.9
Trucks and	2005	178057	529303	66.36
Vintage Cars	2003	650988	NULL	NULL
Vintage Cars	2004	911424	650988	40.01
Vintage Cars	2005	340739	911424	62.61

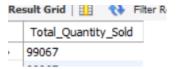
TOTAL QUANTITY SOLD

SELECT

SUM(quantityordered) OVER() AS Total_Quantity_Sold

FROM

sales_table;



TOTAL QUANTITY SOLD BY CATEGORY

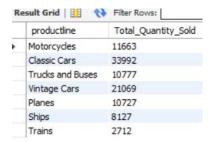
SELECT productline,

SUM(quantityordered) AS Total_Quantity_Sold

FROM

sales_table

GROUP BY productline;



TOTAL QUANTITY SOLD BY CATEGORY AND YEAR

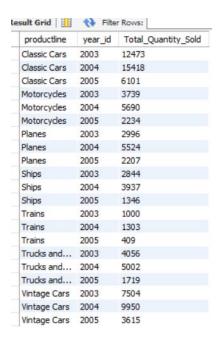
SELECT productline, year_id,

SUM(quantityordered) AS Total_Quantity_Sold

FROM

sales_table

GROUP BY productline, year_id



TOTAL QUANTITY SOLD AND PREVIOUS YEAR QUANTITY SOLD COMPARISON BY CATEGORY-WISE

SELECT productline, year_id,

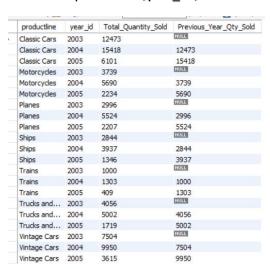
SUM(quantityordered) AS Total_Quantity_Sold,

LAG(SUM(quantityordered)) OVER (PARTITION BY productline ORDER BY year_id) AS Previous_Year_Qty_Sold

FROM

sales_table

GROUP BY productline, year_id



% CHANGE IN QUANTITY SOLD BY CATEGORY-WISE

SELECT productline, year_id,

SUM(quantityordered) AS Total_Quantity_Sold,

LAG(SUM(quantityordered)) OVER (PARTITION BY productline ORDER BY year_id) AS Previous_Year_Qty_Sold,

ABS((1-SUM(quantityordered)/LAG(SUM(quantityordered)) OVER (PARTITION BY productline ORDER BY year_id)))*100 AS percentage_change

FROM

sales_table

GROUP BY productline, year_id

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productline	year_id	Total_Quantity_Sold	Previous_Year_Qty_Sold	percentage_change
Classic Cars	2003	12473	NULL	NULL
Classic Cars	2004	15418	12473	23.6110
Classic Cars	2005	6101	15418	60.4294
Motorcycles	2003	3739	NULL	NULL
Motorcycles	2004	5690	3739	52.1797
Motorcycles	2005	2234	5690	60.7381
Planes	2003	2996	HULL	NULL
Planes	2004	5524	2996	84.3792
Planes	2005	2207	5524	60.0471
Ships	2003	2844	NULL	NULL
Ships	2004	3937	2844	38.4318
Ships	2005	1346	3937	65.8115
Trains	2003	1000	NULL	NULL
Trains	2004	1303	1000	30.3000
Trains	2005	409	1303	68.6109
Trucks and	2003	4056	HULL	NULL
Trucks and	2004	5002	4056	23.3235
Trucks and	2005	1719	5002	65.6337
Vintage Cars	2003	7504	HULL	NULL
Vintage Cars	2004	9950	7504	32.5959
Vintage Cars	2005	3615	9950	63.6683

YEARLY WISE QUANTITY SOLD AND DIFFERENCES IN QUANTITY SOLD YEAR TO YEAR

SELECT year_id,

SUM(quantityordered),

LAG(SUM(quantityordered)) over() AS Previus_year_Orders,

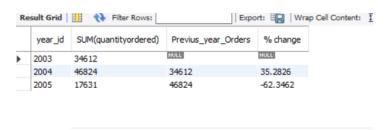
(SUM(quantityordered)-LAG(SUM(quantityordered)) over())/LAG(SUM(quantityordered)) over() *100 '% change'

FROM

sales_table

GROUP BY year_id

ORDER BY year_id;

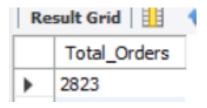


TOTAL ORDERS

SELECT COUNT(productline) OVER() AS Total_Orders

FROM

sales_table;



TOTAL ORDERS BY PRODUCTS

SELECT productline,

COUNT(productline) AS Total_Orders

FROM

sales_table

GROUP BY productline

ORDER BY Total_Orders DESC;

productline	Total_Orders
Classic Cars	967
Vintage Cars	607
Motorcycles	331
Planes	306
Trucks and Buses	301
Ships	234
Trains	77

TOTAL ORDERS BY PRODUCTS AND YEAR TO YEAR

SELECT productline, year_id,

COUNT(productline) AS Total_Orders

FROM

sales_table

GROUP BY productline, year_id

productline	year_id	Total_Orders	productline	year_id	Total_Orders
Classic Cars	2003	366	Ships	2003	81
Classic Cars	2004	442	Ships	2004	115
Classic Cars	2005	159	Ships	2005	38
Motorcycles	2003	109	Trains	2003	28
Motorcycles	2004	164	Trains	2004	37
Motorcycles	2005	58	Trains	2005	12
Planes	2003	85	Trucks and	2003	110
Planes	2004	161	Trucks and	2004	142
Planes	2005	60	Trucks and	2005	49
Ships	2003	81	Vintage Cars	2003	221
Ships	2004	115	Vintage Cars	2004	284
Ships	2005	38	Vintage Cars	2005	102

TOTAL ORDERS BY PRODUCTS AND YEAR TO YEAR DIFFERENCE

SELECT productline, year_id,

COUNT(productline) AS Total_Orders,

LAG(COUNT(productline)) OVER(PARTITION BY productline ORDER BY year_id) AS pre_mon_orders

FROM

sales_table

GROUP BY productline, year_id

ORDER BY productline, year_id;

productline	year_id	Total_Orders	pre_mon_orders				
Classic Cars	2003	366	NULL	productline	year_id	Total_Orders	pre_mon_orders
Classic Cars	2004	442	366	Ships	2003	81	NULL
Classic Cars	2005	159	442	Ships	2004	115	81
Motorcycles	2003	109	NULL	Ships	2005	38	115
Motorcycles	2004	164	109	Trains	2003	28	NULL
Motorcycles	2005	58	164	Trains	2004	37	28
Planes	2003	85	NULL 104	Trains	2005	12	37
				Trucks and	2003	110	NULL
Planes	2004	161	85	Trucks and	2004	142	110
Planes	2005	60	161 NULL	Trucks and	2005	49	142
Ships	2003	81	MOCE	Vintage Cars	2003	221	NULL
Ships	2004	115	81	Vintage Cars	2004	284	221
Ships	2005	38	115	Vintage Cars	2005	102	284
			NULL	viritage cars	2003	102	204

TOTAL ORDERS BY PRODUCTS AND YEAR TO YEAR % CHANGE

SELECT productline, year_id,

COUNT(productline) AS Total_Orders,

LAG(COUNT(productline)) OVER(PARTITION BY productline ORDER BY year_id) AS pre_mon_orders,

ABS(ROUND((LAG(COUNT(productline)) OVER (PARTITION BY productline ORDER BY year_id)-COUNT(productline))/

LAG(COUNT(productline)) OVER (PARTITION BY productline ORDER BY year_id)*100,2)) AS '% CHANGE'

FROM

sales_table

GROUP BY productline, year_id

productline	year_id	Total_Orders	pre_mon_orders	% CHANGE
Classic Cars	2003	366	NULL	NULL
Classic Cars	2004	442	366	20.77
Classic Cars	2005	159	442	64.03
Motorcycles	2003	109	NULL	NULL
Motorcycles	2004	164	109	50.46
Motorcycles	2005	58	164	64.63
Planes	2003	85	NULL	NULL
Planes	2004	161	85	89.41
Planes	2005	60	161	62.73
Ships	2003	81	NULL	NULL
Ships	2004	115	81	41.98
Shine	2005	38	115	66 06

productline	year_id	Total_Orders	pre_mon_orders	% CHANGE
Ships	2004	115	81	41.98
Ships	2005	38	115	66.96
Trains	2003	28	NULL	NULL
Trains	2004	37	28	32.14
Trains	2005	12	37	67.57
Trucks and	2003	110	NULL	NULL
Trucks and	2004	142	110	29.09
Trucks and	2005	49	142	65.49
Vintage Cars	2003	221	NULL	NULL
Vintage Cars	2004	284	221	28.51
Vintage Cars	2005	102	284	64.08

YEAR WISE TOTAL ORDERS

SELECT year_id,

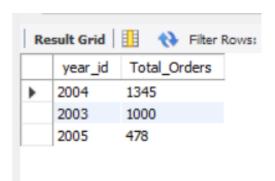
COUNT(productline) AS Total_Orders

FROM

sales_table

GROUP BY year_id

ORDER BY Total_Orders DESC;



TOTAL SALES BY DEALSIZE

SELECT dealsize,

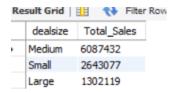
ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY dealsize

ORDER BY Total_Sales DESC;



DETAILS BY DEALSIZE

SELECT dealsize,

ROUND(SUM(sales)) AS Total_Sales,

COUNT(productline) AS Total_Orders,

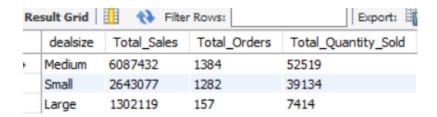
SUM(quantityordered) AS Total_Quantity_Sold

FROM

sales_table

GROUP BY dealsize

ORDER BY Total_Sales DESC;



DETAILS OF ORDER STATUS

SELECT status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity_Sold

FROM

sales_table

GROUP BY status;

status	Total_Orders	Total_Quantity_Sold
Shipped	2617	91403
Disputed	14	597
In Process	41	1490
Cancelled	60	2038
On Hold	44	1879
Resolved	47	1660

TOTAL SHIPPED ORDERS AND QUANTITY

SELECT productline, status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity

FROM

sales_table

WHERE status = 'Shipped'

GROUP BY productline, status

ORDER BY productline, status;

productline	status	Total_Orders	Total_Quantity
Classic Cars	Shipped	914	31955
Motorcycles	Shipped	324	11355
Planes	Shipped	271	9389
Ships	Shipped	195	6792
Trains	Shipped	75	2622
Trucks and Buses	Shipped	281	10009
Vintage Cars	Shipped	557	19281

TOTAL DISPUTED ORDERS AND QUANTITY

SELECT productline, status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity

FROM

sales_table

WHERE status = 'Disputed'

GROUP BY productline, status

ORDER BY productline, status;

	4.		
productline	status	Total_Orders	Total_Quantity
Classic Cars	Disputed	3	174
Motorcycles	Disputed	6	259
Planes	Disputed	2	63
Ships	Disputed	1	32
Vintage Cars	Disputed	2	69

TOTAL CANCELLED ORDERS AND QUANTITY

SELECT productline, status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity

FROM

sales_table

WHERE status = 'Cancelled'

GROUP BY productline, status

ORDER BY productline, status;

productline	status	Total_Orders	Total_Quantity
Classic Cars	Cancelled	16	493
Planes	Cancelled	12	415
Ships	Cancelled	18	628
Trains	Cancelled	1	42
Vintage Cars	Cancelled	13	460

TOTAL HOLD ORDERS AND QUANTITY

SELECT productline, status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity

FROM

sales_table

WHERE status = 'On Hold'

GROUP BY productline, status

ORDER BY productline, status;

productline	status	Total_Orders	Total_Quantity
Classic Cars	On Hold	12	512
Motorcycles	On Hold	1	49
Planes	On Hold	9	418
Ships	On Hold	8	271
Trains	On Hold	1	48
Trucks and Buses	On Hold	4	171
Vintage Cars	On Hold	9	410

TOTAL IN PROCESS ORDERS AND QUANTITY

SELECT productline, status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity

FROM

sales_table

WHERE status = 'In Process'

GROUP BY productline, status

ORDER BY productline, status;

productline	status	Total_Orders	Total_Quantity
Classic Cars	In Process	14	564
Trucks and Buses	In Process	11	394
Vintage Cars	In Process	16	532

TOTAL RESOLVED ORDERS AND QUANTITY

SELECT productline, status,

COUNT(productline) AS Total_Orders,

SUM(quantityordered) AS Total_Quantity

FROM

sales_table

WHERE status = 'Resolved'

GROUP BY productline, status

ORDER BY productline, status;

productline	status	Total_Orders	Total_Quantity
Classic Cars	Resolved	8	294
Planes	Resolved	12	442
Ships	Resolved	12	404
Trucks and Buses	Resolved	5	203
Vintage Cars	Resolved	10	317

TOP 10 CUSTOMERS WITH HIGHEST SALES

SELECT customername,

ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY customername

ORDER BY Total_Sales DESC

LIMIT 10;

customername	Total_Sales
Euro Shopping Channel	912294
Mini Gifts Distributors Ltd.	654858
Australian Collectors, Co.	200995
Muscle Machine Inc	197737
La Rochelle Gifts	180125
Dragon Souveniers, Ltd.	172990
Land of Toys Inc.	164069
The Sharp Gifts Warehouse	160010
AV Stores, Co.	157808
Anna's Decorations, Ltd	153996

BOTTOM 10 CUSTOMERS WITH HIGHEST SALES

SELECT customername,

ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY customername

ORDER BY Total_Sales

LIMIT 10;

customername	Total_Sales
Boards & Toys Co.	9129
Atelier graphique	24180
Auto-Moto Classics Inc.	26479
Microscale Inc.	33145
Royale Belge	33440
Bavarian Collectables Imports, Co.	34994
Double Decker Gift Stores, Ltd	36019
Cambridge Collectables Co.	36164
West Coast Collectables Co.	46085
Men 'R' US Retailers, Ltd.	48048

TOP 10 COUNTRY WISE TOTAL SALES

SELECT country,

ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY country

ORDER BY Total_Sales DESC

LIMIT 10;

country	Total_Sales
USA	3627983
Spain	1215687
France	1110917
Australia	630623
UK	478880
Italy	374674
Finland	329582
Norway	307464
Singapore	288488
Denmark	245637

BOTTOM 10 COUNTRY WISE TOTAL SALES

SELECT country,

ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY country

ORDER BY Total_Sales

LIMIT 10;

country	Total_Sales
Ireland	57756
Philippines	94016
Belgium	108413
Switzerland	117714
Japan	188168
Austria	202063
Sweden	210014
Germany	220472
Canada	224079
Denmark	245637

TOTAL SALES BY TERRITORY

SELECT territory,

ROUND(SUM(sales)) AS Total_Sales

FROM

sales_table

GROUP BY territory

ORDER BY Total_Sales DESC

LIMIT 10;

territory	Total_Sales
EMEA	4979272
NA	3852061
APAC	746122
Japan	455173

TOTAL SALES BY MONTH AND RESPECTIVE YEAR

```
SELECT year_id,
month_id,
CASE
       WHEN month_id = 1 THEN 'Jan'
       WHEN month_id = 2 THEN 'Feb'
       WHEN month_id = 3 THEN 'Mar'
       WHEN month_id = 4 THEN 'Apr'
       WHEN month_id = 5 THEN 'May'
       WHEN month_id = 6 THEN 'Jun'
       WHEN month_id = 7 THEN 'July'
       WHEN month_id = 8 THEN 'Aug'
       WHEN month_id = 9 THEN 'Sep'
       WHEN month_id = 10 THEN 'Oct'
       WHEN month_id = 11 THEN 'Nov'
       WHEN month_id = 12 THEN 'Dec'
END AS Month_name,
ROUND(SUM(sales)) AS Total_Sales
FROM
sales_table
GROUP BY month_id,year_id
ORDER BY year_iD ,month_id;
```

year_id	month_id	Month_name	Total_Sales
2003	1	Jan	129754
2003	2	Feb	140836
2003	3	Mar	174505
2003	4	Apr	201610
2003	5	May	192673
2003	6	Jun	168083
2003	7	July	187732
2003	8	Aug	197809
2003	9	Sep	263973
2003	10	Oct	568291
2003	11	Nov	1029838
2003	12	Dec	261876
2004	1	Jan	316577
2004	2	Feb	311420
2004	3	Mar	205734
2004	4	Apr	206148
2004	5	May	273438
2004	6	Jun	286674
2004	7	July	327144
2004	8	Aug	461501
2004	9	Sep	320751
2004	10	Oct	552924
2004	11	Nov	1089048
2004	12	Dec	372803
2005	1	100	220542
	1	Jan	339543
2005	2	Feb	358186
2005	3	Mar	374263
2005	4	Apr	261633
2005	5	May	457861

TOTAL RUNNING SALES TOTAL

SELECT year_id,month_id,

ROUND(SUM(sales))AS Total_Sales,

SUM(ROUND(SUM(sales))) OVER (PARTITION BY year_id ORDER BY month_id) AS Running_Total

FROM

sales_table

GROUP BY year_id,month_id

ORDER BY year_id,month_id;

year_id	month_id	Total_Sales	Running_Total
2003	1	129754	129754
2003	2	140836	270590
2003	3	174505	445095
2003	4	201610	646705
2003	5	192673	839378
2003	6	168083	1007461
2003	7	187732	1195193
2003	8	197809	1393002
2003	9	263973	1656975
2003	10	568291	2225266
2003	11	1029838	3255104
2003	12	261876	3516980
2004	1	316577	316577
2004	2	311420	627997
2004	3	205734	833731
2004	4	206148	1039879
2004	5	273438	1313317
2004	6	286674	1599991
2004	7	327144	1927135
2004	8	461501	2388636
2004	9	320751	2709387
2004	10	552924	3262311
2004	11	1089048	4351359
2004	12	372803	4724162
2005	1	339543	339543
2005	2	358186	697729
2005	3	374263	1071992
2005	4	261633	1333625
2005	5	457861	1791486

TOTAL SALES % CHANGES MONTH TO MONTH IN RESPECTED YEARS

SELECT year_id,month_id,

ROUND(SUM(sales))AS Total_Sales,

ROUND(LAG(SUM(sales)) OVER (PARTITION BY year_id ORDER BY month_id)) AS Prev_Mon_Sales,

ROUND((ROUND(LAG(SUM(sales)) OVER (PARTITION BY year_id ORDER BY month_id))-ROUND(SUM(sales))) /

ROUND(LAG(SUM(sales)) OVER (PARTITION BY year_id ORDER BY month_id)) * 100,2) AS '% CHANGE'

FROM

sales_table

GROUP BY year_id,month_id

ORDER BY year_id,month_id;

year_id	month_id	Total_Sales	Prev_Mon_Sales	% CHANGE
2003	1	129754	NULL	NULL
2003	2	140836	129754	-8.54
2003	3	174505	140836	-23.91
2003	4	201610	174505	-15.53
2003	5	192673	201610	4.43
2003	6	168083	192673	12.76
2003	7	187732	168083	-11.69
2003	8	197809	187732	-5.37
2003	9	263973	197809	-33.45
2003	10	568291	263973	-115.28
2003	11	1029838	568291	-81.22
2003	12	261876	1029838	74.57
2004	1	316577	NULL	NULL
2004	2	311420	316577	1.63
2004	3	205734	311420	33.94
2004	4	206148	205734	-0.2
2004	5	273438	206148	-32.64
2004	6	286674	273438	-4.84
2004	7	327144	286674	-14.12
2004	8	461501	327144	-41.07
2004	9	320751	461501	30.5
2004	10	552924	320751	-72.38
2004	11	1089048	552924	-96.96
2004	12	372803	1089048	65.77
2005	1	339543	NULL	NULL
2005	2	358186	339543	-5.49
2005	3	374263	358186	-4.49
2005	4	261633	374263	30.09
2005	5	457861	261633	-75