



TP06

INTRO TO DATABASE



Do Davin



USE classicmodels;

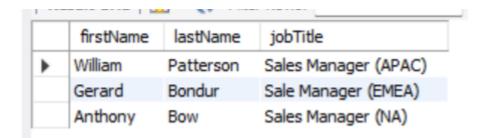
- -- 1. Show rst name and last name of customer from France.
- -- (Hint: SELECT, WHERE clause on country column from customers)

SELECT contactLastName, contactFirstName FROM Customers WHERE country = 'France';

	contactLastName	contactFirstName		
١	Schmitt	Carine		
	Labrune	Janine		
	Saveley	Mary		
	Rancé	Martine		
	Bertrand	Marie		
	Citeaux	Frédérique		
	Roulet	Annette		
	Da Silva	Daniel		
	Tonini	Daniel		

- -- 2. Show the rst name and last name of employee who is a sale manager.
- -- (Hint: SELECT, WHERE on jobTitle in employees)

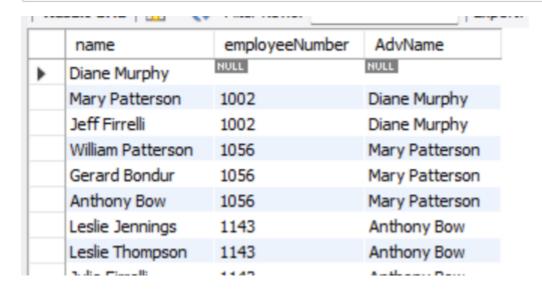
SELECT firstName, lastName, jobTitle FROM Employees WHERE jobTitle LIKE 'sale%manager%';



- -- 3. Pair the name and number of employees along with the name of his/her advisor.
- -- (Hint: SELF JOIN on employees using employeeNumber = reportsTo)

SELECT concat(e1.firstName, ' ', e1.lastName) as name, e2.employeeNumber, concat(e2.firstName, ' ', e2.lastName) AS AdvName FROM

employees AS e1
 LEFT JOIN employees AS e2 ON e1.reportsTo = e2.employeeNumber;

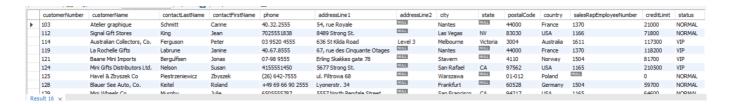


- -- 4. Pair the name and number of customers along with the name of sale representative that works with
- -- them. If the sale representative is null, replace iwith N/A.**
- -- (Hint: LEFT JOIN between customers and employees with COALESCE)

SELECT c.contactLastName, c.contactFirstName, e.lastName, e.firstName
FROM customers AS c JOIN employees AS e
ON c.salesRepEmployeeNumber = e.employeeNumber;

	Court direction		Export:	
	contactLastName	contactFirstName	lastName	firstName
١	Schmitt	Carine	Hernandez	Gerard
	King	Jean	Thompson	Leslie
	Ferguson	Peter	Fixter	Andy
	Labrune	Janine	Hernandez	Gerard
	Bergulfsen	Jonas	Jones	Barry
	Nelson	Susan	Jennings	Leslie
	Keitel	Roland	Jones	Barry
	Murphy	Julie	Jennings	Leslie
	Lee	Kwai	Vanauf	George

- -- 5. Show information of customer, if the creditlimit is greater than 80000, then the customer is VIP. If not,
- -- he is normal.
- -- (Hint: SELECT, CASE WHEN or IF on creditLimit from customers)
- SELECT *, IF(creditLimit > 80000, 'VIP', 'NORMAL') AS status FROM customers;



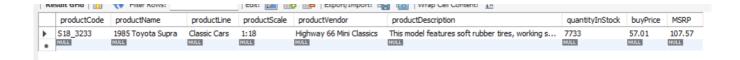
- -- 6. Show all products which are in "classic car" product line.
- -- (Hint: SELECT, WHERE on productLine from products)

SELECT * FROM products WHERE productLine LIKE '%classic%car%';

						1			
	productCode	productName	productLine	productScale	productVendor	productDescription	quantityInStock	buyPrice	MSRP
•	S10_1949	1952 Alpine Renault 1300	Classic Cars	1:10	Classic Metal Creations	Turnable front wheels; steering function; detail	7305	98.58	214.3
	S10_4757	1972 Alfa Romeo GTA	Classic Cars	1:10	Motor City Art Classics	Features include: Turnable front wheels; steeri	3252	85.68	136
	S10_4962	1962 LanciaA Delta 16V	Classic Cars	1:10	Second Gear Diecast	Features include: Turnable front wheels; steeri	6791	103.42	147.74
	S12_1099	1968 Ford Mustang	Classic Cars	1:12	Autoart Studio Design	Hood, doors and trunk all open to reveal highly	68	95.34	194.57
	S12_1108	2001 Ferrari Enzo	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detail	3619	95.59	207.8
	S12_3148	1969 Corvair Monza	Classic Cars	1:18	Welly Diecast Productions	1:18 scale die-cast about 10" long doors open,	6906	89.14	151.08
	S12_3380	1968 Dodge Charger	Classic Cars	1:12	Welly Diecast Productions	1:12 scale model of a 1968 Dodge Charger. Ho	9123	75.16	117.44
	S12_3891	1969 Ford Falcon	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detail	1049	83.05	173.02
	C12 3000	1070 Dhomouth Hami Cuda	Classic Care	1-17	Studio M Art Models	Very detailed 1070 Dlymouth Cuda model in 1+1	5663	21 02	70 8

- -- 7. Show all products containing "Toyota" in its name.
- -- (Hint: SELECT, LIKE clause on productName from products)

SELECT * FROM products WHERE productName LIKE '%Toyota%';



- -- 8. Show all products with the scale smaller than 1:24.
- -- (Hint: SELECT, consider CAST/CONVERT on productScale string if comparison needed)

SELECT * FROM products WHERE CAST(SUBSTRING_INDEX(productScale, ':', -1) AS
DECIMAL) < 24;</pre>

R	esuit Grid III	Pilter Rows:	K: [44] HS HS	export/import:	Wrap Ceil Content	: <u>+^</u>			
	productCode	productName	productLine	productScale	productVendor	productDescription	quantityInStock	buyPrice	MSRP
•	S10_1678	1969 Harley Davidson Ultimate Chopper	Motorcycles	1:10	Min Lin Diecast	This replica features working kickstand, front su	7933	48.81	95.7
	S10_1949	1952 Alpine Renault 1300	Classic Cars	1:10	Classic Metal Creations	Turnable front wheels; steering function; detail	7305	98.58	214.3
	S10_2016	1996 Moto Guzzi 1100i	Motorcycles	1:10	Highway 66 Mini Classics	Official Moto Guzzi logos and insignias, saddle b	6625	68.99	118.94
	S10_4698	2003 Harley-Davidson Eagle Drag Bike	Motorcycles	1:10	Red Start Diecast	Model features, official Harley Davidson logos a	5582	91.02	193.66
	S10_4757	1972 Alfa Romeo GTA	Classic Cars	1:10	Motor City Art Classics	Features include: Turnable front wheels; steeri	3252	85.68	136
	S10_4962	1962 LanciaA Delta 16V	Classic Cars	1:10	Second Gear Diecast	Features include: Turnable front wheels; steeri	6791	103.42	147.74
	S12_1099	1968 Ford Mustang	Classic Cars	1:12	Autoart Studio Design	Hood, doors and trunk all open to reveal highly	68	95.34	194.57
	S12_1108	2001 Ferrari Enzo	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detail	3619	95.59	207.8
pro	0 ducts 19 ×	1058 Catra Riic	Trucks and Ruses	1-17	Wally Discost Productions	Model festures 30 windows skuliabte & alsre re	1570	77 0	136 67

- -- 9. Show all products from the vendor "Autoart Studio Design".
- -- (Hint: SELECT, WHERE on productVendor from products)

SELECT * FROM products WHERE productVendor LIKE '%autoart%studio%design%';

	productCode	productName	productLine	productScale	productVendor	productDescription	quantityInStock	buyPrice	MSRP
•	S12_1099	1968 Ford Mustang	Classic Cars	1:12	Autoart Studio Design	Hood, doors and trunk all open to reveal highly	68	95.34	194.57
	S18_2325	1932 Model A Ford J-Coupe	Vintage Cars	1:18	Autoart Studio Design	This model features grille-mounted chrome horn	9354	58.48	127.13
	S24_1578	1997 BMW R 1100 S	Motorcycles	1:24	Autoart Studio Design	Detailed scale replica with working suspension a	7003	60.86	112.7
	S24_2300	1962 Volkswagen Microbus	Trucks and Buses	1:24	Autoart Studio Design	This 1:18 scale die cast replica of the 1962 Micr	2327	61.34	127.79
	S24_2841	1900s Vintage Bi-Plane	Planes	1:24	Autoart Studio Design	Hand crafted diecast-like metal bi-plane is re-cr	5942	34.25	68.51
	S24_3420	1937 Horch 930V Limousine	Vintage Cars	1:24	Autoart Studio Design	Features opening hood, opening doors, openin	2902	26.3	65.75
	S50_4713	2002 Yamaha YZR M1	Motorcycles	1:50	Autoart Studio Design	Features rotating wheels , working kick stand	600	34.17	81.36
	S700_1138	The Schooner Bluenose	Ships	1:700	Autoart Studio Design	All wood with canvas sails. Measures 31 1/2 inc	1897	34	66.67
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- -- 10. Show all products with MSRP higher than twice the cost of buyPrice.
- -- (Hint: SELECT, WHERE with comparison expression: MSRP > 2 * buyPrice)

SELECT * FROM products WHERE MSRP > 2 * buyPrice;

	productCode	productName	productLine	productScale	productVendor	productDescription	quantityInStock	buyPrice	MSRP
•	S10_1949	1952 Alpine Renault 1300	Classic Cars	1:10	Classic Metal Creations	Turnable front wheels; steering function; detail	7305	98.58	214.3
	S10_4698	2003 Harley-Davidson Eagle Drag Bike	Motorcycles	1:10	Red Start Diecast	Model features, official Harley Davidson logos a	5582	91.02	193.66
	S12_1099	1968 Ford Mustang	Classic Cars	1:12	Autoart Studio Design	Hood, doors and trunk all open to reveal highly	68	95.34	194.57
	S12_1108	2001 Ferrari Enzo	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detail	3619	95.59	207.8
	S12_2823	2002 Suzuki XREO	Motorcycles	1:12	Unimax Art Galleries	Official logos and insignias, saddle bags located \dots	9997	66.27	150.62
	S12_3891	1969 Ford Falcon	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detail	1049	83.05	173.02
	S12_3990	1970 Plymouth Hemi Cuda	Classic Cars	1:12	Studio M Art Models	Very detailed 1970 Plymouth Cuda model in 1:1	5663	31.92	79.8
	S12_4473	1957 Chevy Pickup	Trucks and Buses	1:12	Exoto Designs	1:12 scale die-cast about 20" long Hood opens,	6125	55.7	118.5
	S18 1007	1040 Ford Dickup Truck	Trucke and Russe	1+19	Studio M Art Models	This model features soft rubber tires working s	2613	EB 33	116 67

- -- 11. Show information of sale representative of the customer "Land of Toys Inc."
- -- (Hint: JOIN between customers and employees on salesRepEmployeeNumber)

SELECT * FROM customers AS c JOIN employees AS e ON c.salesRepEmployeeNumber =
e.employeeNumber WHERE customerName LIKE '%land%of%toys%inc%';



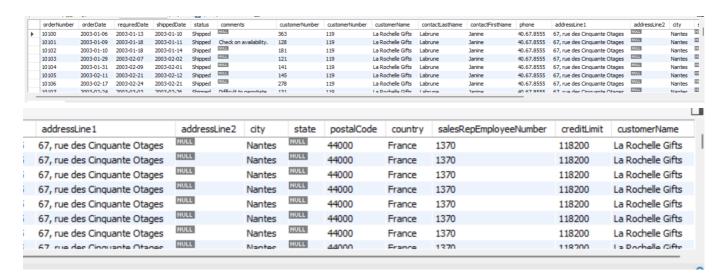
- -- 12. Show information about order that is shipped later than the required date.
- -- (Hint: SELECT, WHERE on orders with shippedDate > requiredDate)

SELECT * FROM orders WHERE shippedDate > requiredDate;



- -- 13. Show all orders made by "La Rochelle Gifts".
- -- (Hint: JOIN between orders and customers on customerNumber, WHERE customerName)

SELECT *, customerName FROM orders JOIN customers WHERE customerName LIKE
'%la%rochelle%gifts';



- -- 14. Show all products ordered by "La Rochelle Gifts".
- -- (Hint: JOIN across customers, orders, orderdetails, and products)

SELECT * FROM customers AS c

JOIN orders AS o ON c.customerNumber = o.customerNumber

JOIN orderdetails AS od ON o.orderNumber = od.orderNumber

JOIN products AS p ON p.productCode = od.productCode

WHERE c.customerName = 'La Rochelle Gifts';

			1													
	customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine 1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit	orderNumber	orderDate	requiredDati
•	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	HULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	NULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	NULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	NULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	NULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	NULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	119	La Rochelle Gifts	Labrune	Janine	40.67.8555	67, rue des Cinquante Otages	NULL	Nantes	NULL	44000	France	1370	118200	10275	2004-07-23	2004-08-02
	110	I a Dochalla Cifte	Lahrina	Tanine	40 67 8555	67 rue des Cinquante Otanes	NULL	Nantae	NULL	44000	France	1370	118200	10775	2004-07-23	2004-08-02

- -- 15. Show customer's name who has ordered more than 15 products in once.
- -- (Hint: JOIN, GROUP BY, HAVING, count quantityOrdered)

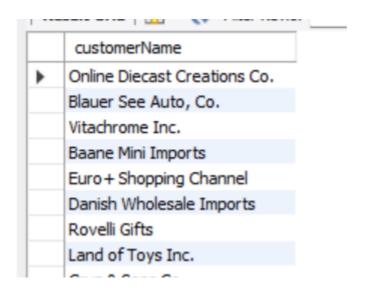
SELECT c.customerName FROM customers ${\sf c}$

JOIN orders o ON c.customerNumber = o.customerNumber

JOIN orderdetails od ON o.orderNumber = od.orderNumber

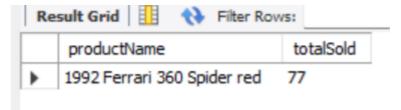
GROUP BY o.orderNumber

HAVING SUM(od.quantityOrdered) > 15;



```
-- 16. Show the best-selling product in "2004-02".
-- (Hint: JOIN, SUM(quantityOrdered), GROUP BY, ORDER BY, LIMIT 1, lter orderDate by
-- month)

SELECT p.productName, SUM(od.quantityOrdered) AS totalSold
    FROM orderdetails od
    JOIN orders o ON od.orderNumber = o.orderNumber
    JOIN products p ON od.productCode = p.productCode
    WHERE o.orderDate LIKE '2004-02%'
    GROUP BY p.productCode
    ORDER BY totalSold DESC
    LIMIT 1;
```



```
-- 17. Find the lowest sale price of each product.-- (Hint: SELECT, MIN(priceEach), GROUP BY productCode from orderdetails)
```

SELECT productCode, MIN(priceEach) FROM orderdetails GROUP BY productCode;

IN	suit driu	Lines MOMP			
	productCode	MIN(priceEach)			
•	S10_1678	76.56			
	S10_1949	171.44			
	S10_2016	95.15			
	S10_4698	154.93			
	S10_4757	108.8			
	S10_4962	119.67			
	S12_1099	155.66			
	S12_1108	166.24			
	C12 1666	100 34			

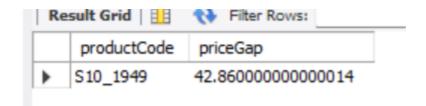
- -- 18. Find the biggest gap of sale price of each product.
- -- (Hint: SELECT, MAX(priceEach) MIN(priceEach), GROUP BY productCode)

SELECT productCode, MAX(priceEach) - MIN(priceEach) AS priceGap FROM orderdetails
 GROUP BY productCode;

	productCode	priceGap			
•	S10_1678	19.14			
	S10_1949	42.860000000000014			
	S10_2016	23.78999999999999			
	S10_4698	38.72999999999999			
	S10_4757	27.200000000000003			
	S10_4962	28.0700000000000007			
	S12_1099	36.96000000000001			
	S12_1108	41.56			
	\$12 1666	27 2200000000000084			

```
-- 19. Find the product with the biggest gap of sale price.
-- (Hint: Use subquery from #18, ORDER BY gap DESC, LIMIT 1)

SELECT productCode, priceGap FROM (
        SELECT productCode, MAX(priceEach) - MIN(priceEach) AS priceGap FROM orderdetails
        GROUP BY productCode
) AS priceGaps
ORDER BY priceGap DESC
LIMIT 1;
```



```
-- 20. Find the total cost of all orders of each customer.
-- (Hint: JOIN customers, orders, orderdetails; SUM(priceEach * quantityOrdered),
-- GROUP BY customer)

SELECT c.customerName, SUM(od.priceEach * od.quantityOrdered) AS totalOrderCost
    FROM customers c
    JOIN orders o ON c.customerNumber = o.customerNumber
    JOIN orderdetails od ON o.orderNumber = od.orderNumber
    GROUP BY c.customerNumber;
```

	customerName	totalOrderCost		
•	Atelier graphique	22314.36		
	Signal Gift Stores	80180.9799999998		
	Australian Collectors, Co.	180585.07		
	La Rochelle Gifts	158573.11999999997		
	Baane Mini Imports	104224.78999999996		
	Mini Gifts Distributors Ltd.	591827.3399999996		
	Blauer See Auto, Co.	75937.76		
	Mini Wheels Co.	66710.56		
	Land of Toye Inc	140085 14000000007		

```
-- 21. Find the top customer (with the highest total sale cost) of each city.
-- (Hint: JOIN, SUM(...), GROUP BY city, customerName, RANK() or ROW_NUMBER()
partitioned
-- by city)
WITH CustomerSale AS (
    SELECT c.customerName, c.city,
    SUM(od.priceEach * od.quantityOrdered) AS totalSale,
    ROW_NUMBER() OVER (PARTITION BY c.city ORDER BY SUM(od.priceEach *
od.quantityOrdered) DESC) AS rankInCity
    FROM customers c
    JOIN orders o ON c.customerNumber = o.customerNumber
    JOIN orderdetails od ON o.orderNumber = od.orderNumber
    GROUP BY c.customerNumber, c.city
SELECT customerName, city, totalSale
FROM CustomerSale
WHERE rankInCity = 1;
```

	customerName	city	totalSale
•	Diecast Classics Inc.	Allentown	104358.69
	Down Under Souveniers, Inc	Auckland	154622.08000000005
	Enaco Distributors	Barcelona	68520.47
	Rovelli Gifts	Bergamo	127529.68999999999
	Herkku Gifts	Bergen	97562.46999999999
	Gifts4AllAges.com	Boston	84340.32
	Collectables For Less Inc.	Brickhaven	73533.65000000001
	Gift Depot Inc.	Bridgewater	95424.63
Do	Signal Collectibles I td	Rrichana	42570 37

```
-- 22. Show monthly income, purchase expense, and prot in a specic year. An order
that is placed in which
-- month would be considered as part of income of that month; the state of
shipment and payment are
-- taken into account.
-- (Hint: JOIN, use MONTH(orderDate), SUM(quantityOrdered * priceEach), buyPrice,
GROUP
-- BY MONTH)
SELECT
   MONTH(o.orderDate) AS month,
    SUM(od.quantityOrdered * od.priceEach) AS income,
    SUM(od.quantityOrdered * p.buyPrice) AS expense,
    SUM(od.quantityOrdered * (od.priceEach - p.buyPrice)) AS profit
FROM orders o
JOIN orderdetails od ON o.orderNumber = od.orderNumber
JOIN products p ON od.productCode = p.productCode
WHERE YEAR(o.orderDate) = 2004
GROUP BY MONTH(o.orderDate)
ORDER BY month;
```

INC	suit uriu	HH / Little MOM21	Export: La Wrap Cell Colliter				
	month	income	expense	profit			
•	1	292385.21000000014	172932.18000000002	119453.03000000001			
	2	289502.83999999997	175959.49000000002	113543.34999999999			
	3	217691.26	131090.90000000002	86600.36000000004			
	4	187575.77000000005	111671.98	75903.79000000002			
	5	248325.30000000008	145175.28	103150.02000000003			
	6	343370.73999999993	204348.59000000003	139022.1500000001			
	7	325563.4900000001	197367.70000000004	128195.79000000001			
	8	419327.0899999999	252568.51000000013	166758.58000000005			
D.	Q	783700 7000000000	160116 14000000007	114683 6500000000			

```
-- 23. The same as number 14, but we want months as columns and incomes,
purcase_expense, and prot as
-- rows.
-- (Hint: PIVOT or CASE WHEN with aggregation in SELECT to simulate pivot)
SELECT
    'Income' AS financial_type,
    SUM(CASE WHEN MONTH(o.orderDate) = 1 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS January,
    SUM(CASE WHEN MONTH(o.orderDate) = 2 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS February,
    SUM(CASE WHEN MONTH(o.orderDate) = 3 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS March,
    SUM(CASE WHEN MONTH(o.orderDate) = 4 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS April,
    SUM(CASE WHEN MONTH(o.orderDate) = 5 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS May,
    SUM(CASE WHEN MONTH(o.orderDate) = 6 THEN od.quantityOrdered * od.priceEach
ELSE O END) AS June,
    SUM(CASE WHEN MONTH(o.orderDate) = 7 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS July,
    SUM(CASE WHEN MONTH(o.orderDate) = 8 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS August,
    SUM(CASE WHEN MONTH(o.orderDate) = 9 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS September,
    SUM(CASE WHEN MONTH(o.orderDate) = 10 THEN od.quantityOrdered * od.priceEach
ELSE O END) AS October,
   SUM(CASE WHEN MONTH(o.orderDate) = 11 THEN od.quantityOrdered * od.priceEach
ELSE @ END) AS November,
    SUM(CASE WHEN MONTH(o.orderDate) = 12 THEN od.quantityOrdered * od.priceEach
ELSE 0 END) AS December
FROM orders o
JOIN orderdetails od ON o.orderNumber = od.orderNumber
JOIN products p ON od.productCode = p.productCode
WHERE YEAR(o.orderDate) = 2004
UNION ALL
```

```
SELECT
    'Purchase Expense' AS financial_type,
    SUM(CASE WHEN MONTH(o.orderDate) = 1 THEN od.quantityOrdered * p.buyPrice ELSE
    SUM(CASE WHEN MONTH(o.orderDate) = 2 THEN od.quantityOrdered * p.buyPrice ELSE
Ø END),
    SUM(CASE WHEN MONTH(o.orderDate) = 3 THEN od.quantityOrdered * p.buyPrice ELSE
0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 4 THEN od.quantityOrdered * p.buyPrice ELSE
0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 5 THEN od.quantityOrdered * p.buyPrice ELSE
0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 6 THEN od.quantityOrdered * p.buyPrice ELSE
Ø END),
    SUM(CASE WHEN MONTH(o.orderDate) = 7 THEN od.quantityOrdered * p.buyPrice ELSE
0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 8 THEN od.quantityOrdered * p.buyPrice ELSE
    SUM(CASE WHEN MONTH(o.orderDate) = 9 THEN od.quantityOrdered * p.buyPrice ELSE
0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 10 THEN od.quantityOrdered * p.buyPrice
ELSE 0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 11 THEN od.quantityOrdered * p.buyPrice
ELSE @ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 12 THEN od.quantityOrdered * p.buyPrice
ELSE 0 END)
FROM orders o
JOIN orderdetails od ON o.orderNumber = od.orderNumber
JOIN products p ON od.productCode = p.productCode
WHERE YEAR(o.orderDate) = 2004
UNION ALL
SELECT
    'Profit' AS financial_type,
    SUM(CASE WHEN MONTH(o.orderDate) = 1 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE @ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 2 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE 0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 3 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE @ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 4 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE @ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 5 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE ∅ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 6 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE @ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 7 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE ∅ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 8 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE @ END),
    SUM(CASE WHEN MONTH(o.orderDate) = 9 THEN od.quantityOrdered * (od.priceEach -
p.buyPrice) ELSE @ END),
```

```
SUM(CASE WHEN MONTH(o.orderDate) = 10 THEN od.quantityOrdered * (od.priceEach
- p.buyPrice) ELSE 0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 11 THEN od.quantityOrdered * (od.priceEach
- p.buyPrice) ELSE 0 END),
    SUM(CASE WHEN MONTH(o.orderDate) = 12 THEN od.quantityOrdered * (od.priceEach
- p.buyPrice) ELSE 0 END)
FROM orders o
JOIN orderdetails od ON o.orderNumber = od.orderNumber
JOIN products p ON od.productCode = p.productCode
WHERE YEAR(o.orderDate) = 2004;
```

