# Lab 04 – Multi-Table Queries and Views

## Objective:

The purpose of this lab is to introduce students to querying data from multiple tables. Relationships are used in relational databases to reduce redundant and repetitive data, but it is necessary to reconnect these tables when extracting data and obtaining information. Student will be able to:

- produce query results containing data from multiple tables using ANSI-92 joins and demonstrate their knowledge of inner, outer and full joins.
- To actively troubleshoot queries to handle potentially ambiguous fields across multiple tables through the use of aliases
- Students learn to create and modify views.

## Submission:

***Your submission will be a single WORD file with the solutions provided.***

Your submission needs to follow the same question order and clearly indicate the answers to each question. Make sure every SQL statement terminates with a semicolon.

**ALL questions must be answered using ANSI-92 JOINs unless otherwise stated**. ANSI-89 are obsolete and should not be used in new query derivations. We only teach them in case you see them in the workplace, that you know what they are and how they work.

## Tasks:

### Select data from multiple tables

1. Create a query that shows retail customers first name and last name along with their sales rep employee number and their first name, last name, city, phone numberand postal code for all retail customers who live in Singapore.
    a. Answer this question using an ANSI-89 Join
    b. Answer this question using an ANSI-92 Join

```
SELECT retailcustomers.contactfirstname AS CUST_FNAME ,
retailcustomers.contactlastname AS CUST_LNAME,
retailcustomers.salesrepemployeenumber AS SALESREP_NUMBER,
retailemployees.firstname AS SALESREP_FNAME,retailemployees.lastname AS
SALESREP_LNAME ,
retailcustomers.city AS CUST_CITY,retailcustomers.phone AS
CUST_PHONE,retailcustomers.postalcode AS CUST_POSTCODE
FROM retailemployees , retailcustomers
WHERE retailemployees.employeenumber = retailcustomers.salesrepemployeenumber
AND UPPER(retailcustomers.country) = 'SINGAPORE' ;
-- 2 rows selected.
```

Query Result

SQL | All Rows Fetched: 2 in 0.035 seconds

| | CUST_FNAME | CUST_LNAME | SALESREP_NUMBER | SALESREP_FNAME | SALESREP_LNAME | CUST_CITY | CUST_PHONE | CUST_POSTCODE |
|---|---|---|---|---|---|---|---|---|
| 1 | Eric | Natividad | 1621 | Mami | Nishi | Singapore | +65 221 7555 | 079903 |
| 2 | Wendy | Victorino | 1612 | Peter | Marsh | Singapore | +65 224 1555 | 069045 |

- Answer this question using an ANSI-92 Join

```
SELECT retailcustomers.contactfirstname AS CUST_FNAME ,
retailcustomers.contactlastname AS CUST_LNAME,
retailcustomers.salesrepemployeenumber AS SALESREP_NUMBER,
```

```
retailemployees.firstname AS SALESREP_FNAME,retailemployees.lastname AS
SALESREP_LNAME ,
retailcustomers.city AS CUST_CITY,retailcustomers.phone AS
CUST_PHONE,retailcustomers.postalcode AS CUST_POSTCODE
FROM retailemployees INNER JOIN  retailcustomers
 ON retailemployees.employeenumber =retailcustomers.salesrepemployeenumber
WHERE UPPER(retailcustomers.country) = 'SINGAPORE' ;
--2 rows selected.
```

Query Result

SQL | All Rows Fetched: 2 in 0.035 seconds

| | CUST_FNAME | CUST_LNAME | SALESREP_NUMBER | SALESREP_FNAME | SALESREP_LNAME | CUST_CITY | CUST_PHONE | CUST_POSTCODE |
|---|---|---|---|---|---|---|---|---|
| 1 | Eric | Natividad | 1621 | Mami | Nishi | Singapore | +65 221 7555 | 079903 |
| 2 | Wendy | Victorino | 1612 | Peter | Marsh | Singapore | +65 224 1555 | 069045 |

2. Create a query that displays all retail payments made by retail customers from USA.
   a. Sort the output by Customer Number.
   b. Only display the Customer Number, Customer Name,Country, Payment Date and Amount.
   c. Make sure the date is displayed clearly to know what date it is. (i.e. what date is02-04-19??? – Feb 4, 2019, April 2, 2019, April 19, 2002, ….)

```
--Default day-month-year selection

SELECT customernumber, customername, country, paymentdate AS
"PAYMENTDATE(DAY-MONTH-YY)",amount
FROM retailcustomers JOIN retailpayments USING (customernumber)
WHERE UPPER(retailcustomers.country) LIKE 'USA'
ORDER BY customernumber;
```

Query Result

SQL | All Rows Fetched: 94 in 0.075 seconds

| | CUSTOMERNUMBER | CUSTOMERNAME | COUNTRY | PAYMENTDATE(DAY-MONTH-YY) | AMOUNT |
|---|---|---|---|---|---|
| 1 | 112 | Signal Gift Stores | USA | 20-APR-22 | 5647.18 |
| 2 | 112 | Signal Gift Stores | USA | 17-DEC-04 | 14191.12 |
| 3 | 112 | Signal Gift Stores | USA | 06-JUN-03 | 32641.98 |
| 4 | 112 | Signal Gift Stores | USA | 20-AUG-04 | 33347.88 |
| 5 | 124 | Mini Gifts Distributors Ltd. | USA | 05-MAR-05 | 101244.59 |
| 6 | 124 | Mini Gifts Distributors Ltd. | USA | 28-AUG-04 | 85410.87 |
| 7 | 124 | Mini Gifts Distributors Ltd. | USA | 11-APR-03 | 11044.3 |
| 8 | 124 | Mini Gifts Distributors Ltd. | USA | 16-APR-05 | 83598.04 |
| 9 | 124 | Mini Gifts Distributors Ltd. | USA | 27-DEC-04 | 47142.7 |
| 10 | 124 | Mini Gifts Distributors Ltd. | USA | 02-NOV-04 | 55639.66 |
| 11 | 124 | Mini Gifts Distributors Ltd. | USA | 15-AUG-03 | 111654.4 |
| 12 | 124 | Mini Gifts Distributors Ltd. | USA | 26-MAR-04 | 43369.3 |
| 13 | 124 | Mini Gifts Distributors Ltd. | USA | 25-NOV-03 | 45084.38 |
| 14 | 129 | Mini Wheels Co. | USA | 08-DEC-04 | 26248.78 |
| 15 | 129 | Mini Wheels Co. | USA | 11-DEC-03 | 23923.93 |
| 16 | 129 | Mini Wheels Co. | USA | 09-APR-03 | 16537.85 |
| 17 | 131 | Land of Toys Inc. | USA | 12-MAR-03 | 22292.62 |
| 18 | 131 | Land of Toys Inc. | USA | 02-DEC-04 | 50025.35 |
| 19 | 131 | Land of Toys Inc. | USA | 11-SEP-04 | 35321.97 |

```
--Display in Mon Day Year format
```

**SELECT customernumber, customername, country, TO_CHAR(paymentdate,'MON**

```
DD, YYYY') AS "PAYMENTDATE('MON DD, YYYY')",amount
FROM retailcustomers JOIN retailpayments USING (customernumber)
WHERE UPPER(retailcustomers.country) LIKE 'USA'
ORDER BY customernumber;
```

| | CUSTOMERNUMBER | CUSTOMERNAME | COUNTRY | PAYMENTDATE('MON DD, YYYY') | AMOUNT |
|---|---|---|---|---|---|
| 1 | 112 | Signal Gift Stores | USA | APR 20, 2022 | 5647.18 |
| 2 | 112 | Signal Gift Stores | USA | DEC 17, 2004 | 14191.12 |
| 3 | 112 | Signal Gift Stores | USA | JUN 06, 2003 | 32641.98 |
| 4 | 112 | Signal Gift Stores | USA | AUG 20, 2004 | 33347.88 |
| 5 | 124 | Mini Gifts Distributors Ltd. | USA | MAR 05, 2005 | 101244.59 |
| 6 | 124 | Mini Gifts Distributors Ltd. | USA | AUG 28, 2004 | 85410.87 |
| 7 | 124 | Mini Gifts Distributors Ltd. | USA | APR 11, 2003 | 11044.3 |
| 8 | 124 | Mini Gifts Distributors Ltd. | USA | APR 16, 2005 | 83598.04 |
| 9 | 124 | Mini Gifts Distributors Ltd. | USA | DEC 27, 2004 | 47142.7 |
| 10 | 124 | Mini Gifts Distributors Ltd. | USA | NOV 02, 2004 | 55639.66 |
| 11 | 124 | Mini Gifts Distributors Ltd. | USA | AUG 15, 2003 | 111654.4 |
| 12 | 124 | Mini Gifts Distributors Ltd. | USA | MAR 26, 2004 | 43369.3 |
| 13 | 124 | Mini Gifts Distributors Ltd. | USA | NOV 25, 2003 | 45084.38 |
| 14 | 129 | Mini Wheels Co. | USA | DEC 08, 2004 | 26248.78 |
| 15 | 129 | Mini Wheels Co. | USA | DEC 11, 2003 | 23923.93 |
| 16 | 129 | Mini Wheels Co. | USA | APR 09, 2003 | 16537.85 |
| 17 | 131 | Land of Toys Inc. | USA | MAR 12, 2003 | 22292.62 |
| 18 | 131 | Land of Toys Inc. | USA | DEC 02, 2004 | 50025.35 |
| 19 | 131 | Land of Toys Inc. | USA | SEP 11, 2004 | 35321.97 |

3. Create a query that shows all Canada customers who have not made a payment. Display only the customer number ,customer name, amount sorted by customer number.

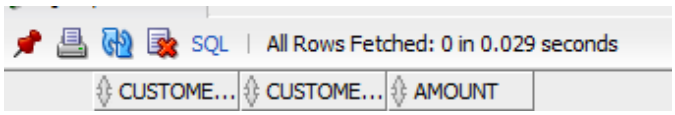
All Canadian customers are

```
SELECT retailcustomers.customernumber, retailcustomers.customername,AMOUNT
FROM retailcustomers LEFT OUTER JOIN retailpayments
ON retailcustomers.customernumber = retailpayments.customernumber
WHERE UPPER(retailcustomers.country) LIKE 'CANADA'
```

| | CUSTOMERNUMBER | CUSTOMERNAME | AMOUNT |
|---|---|---|---|
| 1 | 202 | Canadian Gift Exchange Network | 36527.61 |
| 2 | 202 | Canadian Gift Exchange Network | 33594.58 |
| 3 | 233 | Québec Home Shopping Network | 29070.38 |
| 4 | 233 | Québec Home Shopping Network | 22997.45 |
| 5 | 233 | Québec Home Shopping Network | 16909.84 |
| 6 | 260 | Royal Canadian Collectables, Ltd. | 37527.58 |
| 7 | 260 | Royal Canadian Collectables, Ltd. | 29284.42 |

All Canadian customers who have not made a payment are

```
SELECT retailcustomers.customernumber, retailcustomers.customername,AMOUNT
FROM retailcustomers LEFT OUTER JOIN retailpayments
ON retailcustomers.customernumber = retailpayments.customernumber
WHERE UPPER(retailcustomers.country) LIKE 'CANADA' AND retailpayments.AMOUNT=0
ORDER BY customernumber;
```



## Views and Joins

4. Display all the retail orders with quantity ordered, price of each item, who have their order shipped and who live in Denmark

```
SELECT PRICEEACH,QUANTITYORDERED,STATUS,COUNTRY
FROM retailorders INNER JOIN orderdetails
ON retailorders.ordernumber = orderdetails.ordernumber
INNER JOIN retailcustomers ON retailcustomers.customernumber =
retailorders.customernumber
WHERE UPPER(retailorders.STATUS) LIKE 'SHIPPED' AND UPPER(retailcustomers.country)
LIKE'DENMARK'
ORDER BY retailcustomers.customernumber;
```

SQL | All Rows Fetched: 52 in 0.071 seconds

| | PRICEEACH | QUANTITYORDERED | STATUS | COUNTRY |
|---|---|---|---|---|
| 1 | 127.84 | 50 | Shipped | Denmark |
| 2 | 52.83 | 29 | Shipped | Denmark |
| 3 | 141.88 | 29 | Shipped | Denmark |
| 4 | 136.59 | 22 | Shipped | Denmark |
| 5 | 87.73 | 38 | Shipped | Denmark |
| 6 | 75.48 | 41 | Shipped | Denmark |
| 7 | 117.97 | 43 | Shipped | Denmark |
| 8 | 73.46 | 44 | Shipped | Denmark |
| 9 | 75.47 | 50 | Shipped | Denmark |
| 10 | 54 | 41 | Shipped | Denmark |
| 11 | 86.61 | 29 | Shipped | Denmark |
| 12 | 60.72 | 31 | Shipped | Denmark |
| 13 | 92.16 | 39 | Shipped | Denmark |
| 14 | 99.31 | 22 | Shipped | Denmark |
| 15 | 44.77 | 25 | Shipped | Denmark |
| 16 | 205.72 | 41 | Shipped | Denmark |
| 17 | 93.49 | 34 | Shipped | Denmark |
| 18 | 67.91 | 22 | Shipped | Denmark |
| 19 | 53.88 | 47 | Shipped | Denmark |

5. Create a view (***vwProductOrder***) to list all the retail products with the following data:

a) Product code, product name, msrp, buyprice, quantity ordered, and price for each product in every order.

b) Write a statement to view the results of the view just created.

```
CREATE or replace VIEW vwProductOrder AS
SELECT productcode, productname, msrp, buyprice, quantityordered, priceeach
FROM retailorders JOIN orderdetails USING (ordernumber) JOIN retailproducts USING
(productcode);

SELECT * FROM vwProductOrder
```

SQL | Fetched 1,100 rows in 0.544 seconds

| | PRODUCTCODE | PRODUCTNAME | MSRP | BUYPRICE | QUANTITYORDERED | PRICEEACH |
|---|---|---|---|---|---|---|
| 1 | S18_4721 | 1957 Corvette Convertible | 148.8 | 69.93 | 44 | 147.31 |
| 2 | S24_1578 | 1997 BMW R 1100 S | 112.7 | 60.86 | 48 | 98.05 |
| 3 | S24_2000 | 1960 BSA Gold Star DBD34 | 76.17 | 37.32 | 28 | 61.7 |
| 4 | S24_2360 | 1982 Ducati 900 Monster | 69.26 | 47.1 | 35 | 60.95 |
| 5 | S24_4620 | 1961 Chevrolet Impala | 80.84 | 32.33 | 28 | 68.71 |
| 6 | S32_2206 | 1982 Ducati 996 R | 40.23 | 24.14 | 34 | 33.39 |
| 7 | S32_4485 | 1974 Ducati 350 Mk3 Desmo | 102.05 | 56.13 | 22 | 102.05 |
| 8 | S50_4713 | 2002 Yamaha YZR M1 | 81.36 | 34.17 | 21 | 74.85 |
| 9 | S12_1099 | 1968 Ford Mustang | 194.57 | 95.34 | 27 | 155.66 |
| 10 | S12_3380 | 1968 Dodge Charger | 117.44 | 75.16 | 28 | 113.92 |
| 11 | S12_3990 | 1970 Plymouth Hemi Cuda | 79.8 | 31.92 | 20 | 67.03 |
| 12 | S12_4675 | 1969 Dodge Charger | 115.16 | 58.73 | 36 | 107.1 |
| 13 | S18_1129 | 1993 Mazda RX-7 | 141.54 | 83.51 | 44 | 124.56 |
| 14 | S18_1589 | 1965 Aston Martin DB5 | 124.44 | 65.96 | 42 | 124.44 |
| 15 | S18_1889 | 1948 Porsche 356-A Roadster | 77 | 53.9 | 22 | 74.69 |
| 16 | S18_1984 | 1995 Honda Civic | 142.25 | 93.89 | 21 | 129.45 |
| 17 | S18_2870 | 1999 Indy 500 Monte Carlo SS | 132 | 56.76 | 27 | 130.68 |
| 18 | S18_3232 | 1992 Ferrari 360 Spider red | 169.34 | 77.9 | 45 | 147.33 |
| 19 | S18_3278 | 1969 Dodge Super Bee | 80.41 | 49.05 | 30 | 73.17 |

6. Using the ***vwProductOrder*** view, display the product order information with product name, buyprice ,order line number and whose buy price is in the range from $30 to $40 and whose product code starts with 's32'. Sort the output based on product name and then buy price. (Hint: orderLineNumber is not in the view then how can you get in this query?)

```
SELECT
vwProductOrder.productcode, vwProductOrder.productname,
vwProductOrder.buyprice,orderdetails.orderlinenumber
FROM vwProductOrder JOIN orderdetails
ON vwProductOrder.productcode=orderdetails.productcode
WHERE vwProductOrder.buyprice between 30 and 40 and
lower(vwProductOrder.productcode) like 's32%'
ORDER BY vwProductOrder.productname;
```

| | PRODUCTCODE | PRODUCTNAME | BUYPRICE | ORDERLINENUMBER |
|---|---|---|---|---|
| 1 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 2 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 3 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 4 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 5 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 6 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 7 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 8 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 9 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 10 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 11 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 12 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |
| 13 | S32_4289 | 1928 Ford Phaeton Deluxe | 33.02 | 7 |

7. Create a query that displays the retail customer order information with customer number, first name, last name, phone, and credit limits for all retail customers who do not have any orders.

```
SELECT customernumber, contactfirstname, contactlastname, phone, creditlimit
FROM retailcustomers LEFT OUTER JOIN retailorders USING (customernumber)
WHERE ordernumber IS NULL;
```

SQL | All Rows Fetched: 24 in 0.137 seconds

| | CUSTOMERNUMBER | CONTACTFIRSTNAME | CONTACTLASTNAME | PHONE | CREDITLIMIT |
|---|---|---|---|---|---|
| 1 | 293 | Ed | Harrison | +41 26 425 50 01 | 0 |
| 2 | 335 | Philip | Cramer | 0555-09555 | 0 |
| 3 | 125 | Zbyszek | Piestrzeniewicz | (26) 642-7555 | 0 |
| 4 | 480 | Alexander | Semenov | +7 812 293 0521 | 0 |
| 5 | 303 | Bradley | Schuyler | +31 20 491 9555 | 0 |
| 6 | 409 | Rita | Müller | 0711-555361 | 0 |
| 7 | 369 | Lino | Rodriguez | (1) 354-2555 | 0 |
| 8 | 459 | Sven | Ottlieb | 0241-039123 | 0 |
| 9 | 169 | Isabel | de Castro | (1) 356-5555 | 0 |
| 10 | 273 | Peter | Franken | 089-0877555 | 0 |
| 11 | 168 | Keith | Franco | 2035557845 | 0 |
| 12 | 443 | Alexander | Feuer | 0342-555176 | 0 |
| 13 | 348 | Patricia | McKenna | 2967 555 | 0 |
| 14 | 361 | Karin | Josephs | 0251-555259 | 0 |
| 15 | 465 | Carmen | Anton | +34 913 728555 | 0 |

8. Create a view (***vwEmployeeManager***) to display the information of all retail employees first name and last name and their managers first name and managers last name if there is any manager that the employee reports to. Include all employees, including those who do not report to anyone.

```
CREATE or REPLACE VIEW vwEmployeeManager AS
SELECT e.employeenumber,e.lastname,e.firstname,e.extension,e.email,e.officecode,
e.reportsto,e.jobtitle, m.firstname ||' ' || m.lastname AS manager
FROM retailemployees e FULL JOIN retailemployees m ON m.employeenumber = e.reportsto

SELECT * FROM vwEmployeeManager ORDER BY REPORTSTO;
```

SQL | All Rows Fetched: 45 in 0.031 seconds

| | EMPLOYEENUMBER | LASTNAME | FIRSTNAME | EXTENSION | EMAIL | OFFICECODE | REPORTSTO | JOBTITLE | MANAGER |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1056 | Patterson | Mary | x4611 | mpatterso@classicmodelcars.com | 1 | 1002 | VP Sales | Diane Murphy |
| 2 | 1076 | Firrelli | Jeff | x9273 | jfirrelli@classicmodelcars.com | 1 | 1002 | VP Marketing | Diane Murphy |
| 3 | 1143 | Bow | Anthony | x5428 | abow@classicmodelcars.com | 1 | 1056 | Sales Manager (NA) | Mary Patterson |
| 4 | 1102 | Bondur | Gerard | x5408 | gbondur@classicmodelcars.com | 4 | 1056 | Sale Manager (EMEA) | Mary Patterson |
| 5 | 1088 | Patterson | William | x4871 | wpatterson@classicmodelcars.com | 6 | 1056 | Sales Manager (APAC) | Mary Patterson |
| 6 | 1621 | Nishi | Mami | x101 | mnishi@classicmodelcars.com | 5 | 1056 | Sales Rep | Mary Patterson |
| 7 | 6655555 | GNA | rr | 152 | r@senecacollege.ca | 4 | 1088 | cashier | William Patterson |
| 8 | 1619 | King | Tom | x103 | tking@classicmodelcars.com | 6 | 1088 | Sales Rep | William Patterson |
| 9 | 1612 | Marsh | Peter | x102 | pmarsh@classicmodelcars.com | 6 | 1088 | Sales Rep | William Patterson |
| 10 | 1611 | Fixter | Andy | x101 | afixter@classicmodelcars.com | 6 | 1088 | Sales Rep | William Patterson |
| 11 | 155555 | GNA | rr | 152 | r@senecacollege.ca | 4 | 1088 | cashier | William Patterson |
| 12 | 1370 | Hernandez | Gerard | x2028 | ghernande@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 13 | 1337 | Bondur | Loui | x6493 | lbondur@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 14 | 1401 | Castillo | Pamela | x2759 | pcastillo@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 15 | 1504 | Jones | Barry | x102 | bjones@classicmodelcars.com | 7 | 1102 | Sales Rep | Gerard Bondur |
| 16 | 1501 | Bott | Larry | x2311 | lbott@classicmodelcars.com | 7 | 1102 | Sales Rep | Gerard Bondur |
| 17 | 1702 | Gerard | Martin | x2312 | mgerard@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 18 | 1188 | Firrelli | Julie | x2173 | jfirrelli@classicmodelcars.com | 2 | 1143 | Sales Rep | Anthony Bow |
| 19 | 1166 | Thompson | Leslie | x4065 | lthompson@classicmodelcars.com | 1 | 1143 | Sales Rep | Anthony Bow |
| 20 | 1165 | Jennings | Leslie | x3291 | ljennings@classicmodelcars.com | 1 | 1143 | Sales Rep | Anthony Bow |
| 21 | 1323 | Vanauf | George | x4102 | gvanauf@classicmodelcars.com | 3 | 1143 | Sales Rep | Anthony Bow |

9. Modify the ***vwEmployeeManager*** view so the view returns only employee information for employees who have a manager. Do not DROP and recreate the view – modify it. (Google is your friend).

```
CREATE OR REPLACE VIEW vwEmployeeManager AS
SELECT
e.employeenumber,e.lastname,e.firstname,e.extension,e.email,e.officecode,
e.reportsto,e.jobtitle, m.firstname ||' ' || m.lastname AS manager
FROM retailemployees e FULL JOIN retailemployees m ON m.employeenumber
= e.reportsto
WHERE e.reportsto IS NOT NULL;
```

SQL | All Rows Fetched: 25 in 0.032 seconds

| | EMPLOYEENUMBER | LASTNAME | FIRSTNAME | EXTENSION | EMAIL | OFFICECODE | REPORTSTO | JOBTITLE | MANAGER |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1076 | Firrelli | Jeff | x9273 | jfirrelli@classicmodelcars.com | 1 | 1002 | VP Marketing | Diane Murphy |
| 2 | 1056 | Patterson | Mary | x4611 | mpatterso@classicmodelcars.com | 1 | 1002 | VP Sales | Diane Murphy |
| 3 | 1102 | Bondur | Gerard | x5408 | gbondur@classicmodelcars.com | 4 | 1056 | Sale Manager (EMEA) | Mary Patterson |
| 4 | 1143 | Bow | Anthony | x5428 | abow@classicmodelcars.com | 1 | 1056 | Sales Manager (NA) | Mary Patterson |
| 5 | 1621 | Nishi | Mami | x101 | mnishi@classicmodelcars.com | 5 | 1056 | Sales Rep | Mary Patterson |
| 6 | 1088 | Patterson | William | x4871 | wpatterson@classicmodelcars.com | 6 | 1056 | Sales Manager (APAC) | Mary Patterson |
| 7 | 1619 | King | Tom | x103 | tking@classicmodelcars.com | 6 | 1088 | Sales Rep | William Patterson |
| 8 | 1612 | Marsh | Peter | x102 | pmarsh@classicmodelcars.com | 6 | 1088 | Sales Rep | William Patterson |
| 9 | 1611 | Fixter | Andy | x101 | afixter@classicmodelcars.com | 6 | 1088 | Sales Rep | William Patterson |
| 10 | 6655555 | GNA | rr | 152 | r@senecacollege.ca | 4 | 1088 | cashier | William Patterson |
| 11 | 155555 | GNA | rr | 152 | r@senecacollege.ca | 4 | 1088 | cashier | William Patterson |
| 12 | 1702 | Gerard | Martin | x2312 | mgerard@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 13 | 1504 | Jones | Barry | x102 | bjones@classicmodelcars.com | 7 | 1102 | Sales Rep | Gerard Bondur |
| 14 | 1337 | Bondur | Loui | x6493 | lbondur@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 15 | 1370 | Hernandez | Gerard | x2028 | ghernande@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 16 | 1401 | Castillo | Pamela | x2759 | pcastillo@classicmodelcars.com | 4 | 1102 | Sales Rep | Gerard Bondur |
| 17 | 1501 | Bott | Larry | x2311 | lbott@classicmodelcars.com | 7 | 1102 | Sales Rep | Gerard Bondur |
| 18 | 1323 | Vanauf | George | x4102 | gvanauf@classicmodelcars.com | 3 | 1143 | Sales Rep | Anthony Bow |
| 19 | 1286 | Tseng | Foon Yue | x228 | ftseng@classicmodelcars.com | 3 | 1143 | Sales Rep | Anthony Bow |
| 20 | 1216 | Patterson | Steve | x4334 | spatterson@classicmodelcars.com | 2 | 1143 | Sales Rep | Anthony Bow |
| 21 | 1165 | Jennings | Leslie | x3291 | ljennings@classicmodelcars.com | 1 | 1143 | Sales Rep | Anthony Bow |

10. Drop both ***vwProductOrder*** and ***vwEmployeeManager*** views.

```
DROP VIEW vwProductOrder;
DROP VIEW vwEmployeeManager;
```

```
View VWPRODUCTORDER dropped.


View VWEMPLOYEEMANAGER dropped.
```