Exercise 59 : Independent Subquery

Display the sale id and date for most recent sale.

Database structure

Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT s.Saleid, s.Sldate FROM Sale s WHERE s.Sldate = (SELECT MAX(Sldate) FROM Sale);

Query Result

SALEID	SLDATE
1006	01-Jun-15

1 row(s) selected

Expected Result

SALEID	SLDATE
1006	01-Jun-15

Congratulations !!! Your query is correct.

Exercise 60 : Independent Subquery

Display the names of salesmen who have made at least 2 sales.

Database structure

Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT s.Sname FROM Salesman s INNER JOIN Sale sl ON s.Sid = sl.Sid GROUP BY s.Sname HAVING COUNT(*) >= 2;

Query Result

SNAME
Peter

1 row(s) selected

Expected Result

SNAME
Peter

Congratulations !!! Your query is correct.

Exercise 61 : Independent Subquery

Display the product id and description of those products which are sold in minimum total quantity.

Database structure

Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT p.Prodid, p.Pdesc FROM Product p INNER JOIN Saledetail sd ON p.Prodid = sd.Prodid GROUP BY p.Prodid, p.Pdesc HAVING SUM(sd.Quantity) = (SELECT MIN(SUM(Quantity)) FROM Saledetail GROUP BY Prodid);

Query Result

PRODID	PDESC
103	NULL

1 row(s) selected

Expected Result

PRODID	PDESC
103	NULL

Congratulations !!! Your query is correct.

Exercise 62 : Independent Subquery

Display SId, SName and Location of those salesmen who have total sales amount greater than average sales amount of all the sales made. Amount can be calculated from Price and Discount of Product and Quantity sold.

Database structure

Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT s.Sid, s.Sname, s.Location FROM Salesman s INNER JOIN Sale sl ON s.Sid = sl.Sid INNER JOIN Saledetail sd ON sl.Saleid = sd.Saleid INNER JOIN Product p ON sd.Prodid = p.Prodid GROUP BY s.Sid, s.Sname, s.Location HAVING SUM(p.Price*(100-p.Discount)*sd.Quantity) > (SELECT SUM(pp.Price*(100-pp.Discount)*sdp.Quantity)/COUNT(DISTINCT slp.Saleid) FROM Product pp INNER JOIN Saledetail sdp ON pp.Prodid = sdp.Prodid INNER JOIN Sale slp ON sdp.Saleid = slp.Saleid INNER JOIN Salesman sp ON slp.Sid = sp.Sid);

Query Result

SID	SNAME	LOCATION
1	Peter	London
5	Kevin	London

2 row(s) selected

Expected Result

SID	SNAME	LOCATION
1	Peter	London
5	Kevin	London

Congratulations !!! Your query is correct.

Exercise 63 : Correlated Subquery

Display the product id, category, description and price for those products whose price is maximum in each category.

Database structure

Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT p.Prodid, p.Category, p.Pdesc, p.Price FROM Product p WHERE p.Price = (SELECT MAX(Price) FROM Product pp WHERE p.Category = pp.Category);

Query Result

PRODID	CATEGORY	PDESC	PRICE
102	Apparel	Shirt	20
103	Electronics	NULL	30
104	Sports	Cricket Bat	20
106	ELECTRONICS	Television	40

4 row(s) selected

Expected Result

PRODID	CATEGORY	PDESC	PRICE
102	Apparel	Shirt	20
103	Electronics	NULL	30
104	Sports	Cricket Bat	20
106	ELECTRONICS	Television	40

Congratulations !!! Your query is correct.

Exercise 64 : Correlated Subquery

Display the names of salesmen who have not made any sales.

Database structure

Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT s.Sname FROM Salesman s LEFT JOIN Sale sl ON s.Sid = sl.Sid WHERE sl.Saleid IS NULL;

Query Result

SNAME
Alex
John

2 row(s) selected

Expected Result

SNAME
Alex
John

Congratulations !!! Your query is correct.

Exercise 65 : Correlated Subquery

Display the names of salesmen who have made at least 1 sale in the month of Jun 2015.

Database structure

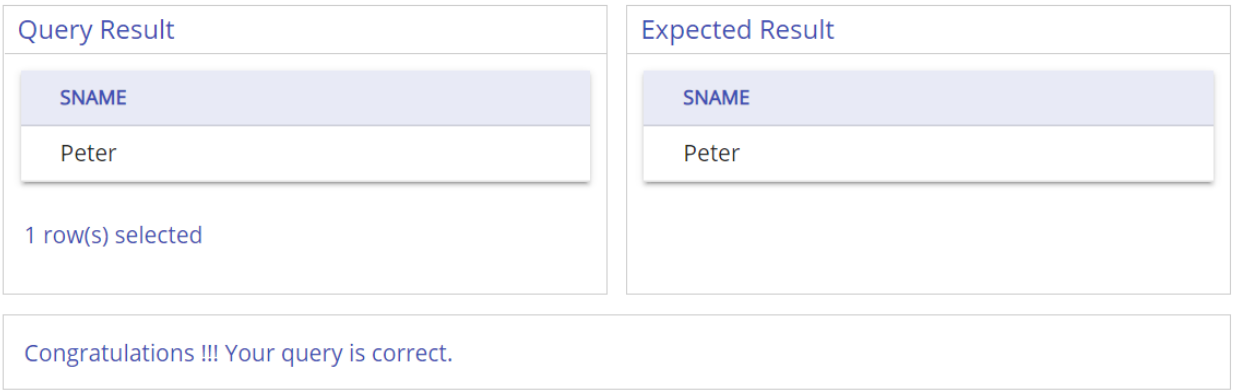
Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT s.Sname FROM Salesman s INNER JOIN Sale sl ON s.Sid = sl.Sid WHERE TO_CHAR(sl.Sldate, 'Mon') = 'Jun' AND TO_CHAR(sl.Sldate, 'yy') = 15 GROUP BY s.Sname HAVING COUNT(sl.Saleid) >= 1;



Exercise 66 : Correlated Subquery

Display SId, SName and Location of those salesmen who have total sales amount greater than average total sales amount of their location calculated per salesman. Amount can be calculated from Price and Discount of Product and Quantity sold.

Database structure

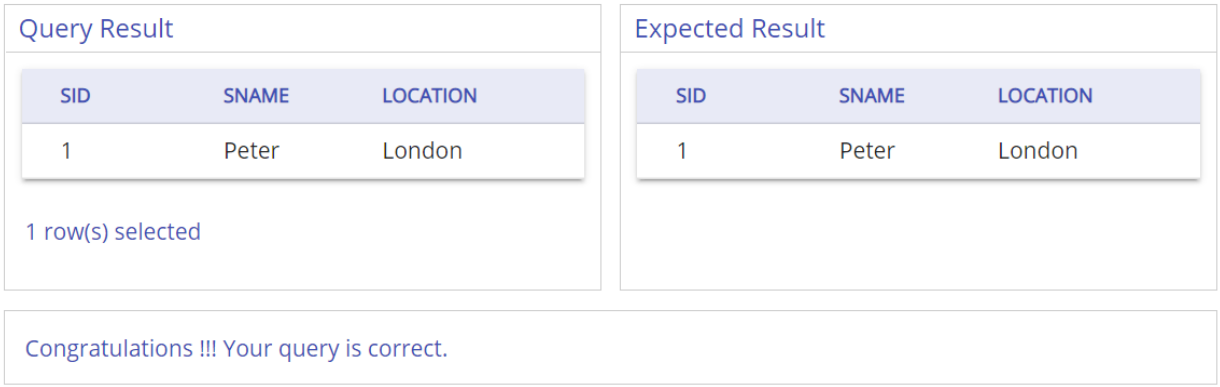
Salesman (Sid, Sname, Location)

Product (Prodid, Pdesc, Price, Category, Discount)

Sale (Saleid, Sid, Sldate, Amount)

Saledetail (Saleid, Prodid, Quantity)

SELECT s.Sid, s.Sname, s.Location FROM Salesman s INNER JOIN Sale sl ON s.Sid = sl.Sid INNER JOIN Saledetail sd ON sl.Saleid = sd.Saleid INNER JOIN Product p ON sd.Prodid = p.Prodid GROUP BY s.Sid, s.Sname, s.Location HAVING SUM(p.Price*(100-p.Discount)*sd.Quantity) > (SELECT SUM(pp.Price*(100-pp.Discount)*sdp.Quantity)/COUNT(DISTINCT sp.Location) FROM Salesman sp INNER JOIN Sale slp ON sp.Sid = slp.Sid INNER JOIN Saledetail sdp ON slp.Saleid = sdp.Saleid INNER JOIN Product pp ON sdp.Prodid = pp.Prodid);



Collaborative Assignment 93

Identify the items which are purchased by customers of retail outlets. Display itemcode, itemtype, descr and category of those items. Display unique rows.

Database structure

Item (Itemcode, Itemtype, Descr, Price, Reorderlevel, Qtyonhand, Category)

Quotation (Quotationid, Sname, Itemcode, Quotedprice, Qdate, Qstatus)

Orders (Orderid, Quotationid, Qtyordered, Orderdate, Status, Pymtdate, Delivereddate, Amountpaid, Pymtmode)

Retailoutlet (Roid, Location, Managerid)

Empdetails (Empid, Empname, Designation, Emailid, Contactno, Worksin, Salary)

Retailstock (Roid, Itemcode, Unitprice, Qtyavailable)

Customer (Custid, Custtype, Custname, Gender, Spouse, Emailid, Address)

Purchasebill (Billid, Roid, Itemcode, Custid, Billamount, Billdate, Quantity)

```
SELECT DISTINCT i.Itemcode, i.Itemtype, i.Descr, i.Category FROM Item i INNER JOIN Purchasebill p ON i.Itemcode = p.Itemcode INNER JOIN Customer c ON p.Custid = C.Custid INNER JOIN Retailstock rs ON p.Roid = rs.Roid;
```

Query Result

ITEMCODE	ITEMTYPE	DESCR	CATEGORY
I1001	FMCG	Britannia Marie Gold Cookies	C
I1003	FMCG	Modern Bread	C
I1007	Apparels	Allen Solly Tie	C
I1015	Apparels	Arrow Jeans	A
I1002	FMCG	Best Rice	C
I1008	Computer	Xbox gamepad	B
I1011	Computer	Intel Motherboard	A
I1010	Computer	Intel C2D Processor	A
I1004	Apparels	Lee T-Shirt	B
I1013	Computer	320GB Hard disk	B

10 row(s) selected

Expected Result

ITEMCODE	ITEMTYPE	DESCR	CATEGORY
I1002	FMCG	Best Rice	C
I1001	FMCG	Britannia Marie Gold Cookies	C
I1004	Apparels	Lee T-Shirt	B
I1003	FMCG	Modern Bread	C
I1013	Computer	320GB Hard disk	B
I1007	Apparels	Allen Solly Tie	C
I1011	Computer	Intel Motherboard	A
I1015	Apparels	Arrow Jeans	A
I1008	Computer	Xbox gamepad	B
I1010	Computer	Intel C2D Processor	A

Congratulations !!! Your query is correct.

Collaborative Assignment 94

Identify the item details that have the least quoted price with the quotation status as 'Rejected'. Display itemcode, itemtype, descr and category of those items.

Database structure

Item (Itemcode, Itemtype, Descr, Price, Reorderlevel, Qtyonhand, Category)

Quotation (Quotationid, Sname, Itemcode, Quotedprice, Qdate, Qstatus)

Orders (Orderid, Quotationid, Qtyordered, Orderdate, Status, Pymtdate, Delivereddate, Amountpaid, Pymtmode)

Retailoutlet (Roid, Location, Managerid)

Empdetails (Empid, Empname, Designation, Emailid, Contactno, Worksin, Salary)

Retailstock (Roid, Itemcode, Unitprice, Qtyavailable)

Customer (Custid, Custtype, Custname, Gender, Spouse, Emailid, Address)

Purchasebill (Billid, Roid, Itemcode, Custid, Billamount, Billdate, Quantity)

SELECT Itemcode, Itemtype, Descr, Category FROM Item WHERE Itemcode IN (SELECT DISTINCT Itemcode FROM Quotation WHERE Quotedprice = (SELECT MIN(Quotedprice) FROM Quotation WHERE Qstatus = 'Rejected') AND Qstatus = 'Rejected');

Query Result

ITEMCODE	ITEMTYPE	DESCR	CATEGORY
I1002	FMCG	Best Rice	C

1 row(s) selected

Expected Result

ITEMCODE	ITEMTYPE	DESCR	CATEGORY
I1002	FMCG	Best Rice	C

Congratulations !!! Your query is correct.

Collaborative Assignment 95

The management would like to know the details of the items which has maximum quoted price amongst the quotations that have status as 'Closed' or 'Rejected'. Display itemcode and descr of those items.

Database structure

Item (Itemcode, Itemtype, Descr, Price, Reorderlevel, Qtyonhand, Category)

Quotation (Quotationid, Sname, Itemcode, Quotedprice, Qdate, Qstatus)

Orders (Orderid, Quotationid, Qtyordered, Orderdate, Status, Pymtdate, Delivereddate, Amountpaid, Pymtmode)

Retailoutlet (Roid, Location, Managerid)

Empdetails (Empid, Empname, Designation, Emailid, Contactno, Worksin, Salary)

Retailstock (Roid, Itemcode, Unitprice, Qtyavailable)

Customer (Custid, Custtype, Custname, Gender, Spouse, Emailid, Address)

Purchasebill (Billid, Roid, Itemcode, Custid, Billamount, Billdate, Quantity)

SELECT Itemcode, Descr FROM Item WHERE Itemcode IN (SELECT DISTINCT Itemcode FROM Quotation WHERE Quotedprice = (SELECT MAX(Quotedprice) FROM Quotation WHERE Qstatus IN ('Rejected','Closed')) AND Qstatus IN ('Rejected','Closed'));

Query Result

ITEMCODE	DESCR
I1010	Intel C2D Processor

1 row(s) selected

Expected Result

ITEMCODE	DESCR
I1010	Intel C2D Processor

Congratulations !!! Your query is correct.

Collaborative Assignment 96

Identify the item having second highest price. Display itemcode, descr and price of those items.

Database structure

Item (Itemcode, Itemtype, Descr, Price, Reorderlevel, Qtyonhand, Category)

Quotation (Quotationid, Sname, Itemcode, Quotedprice, Qdate, Qstatus)

Orders (Orderid, Quotationid, Qtyordered, Orderdate, Status, Pymtdate, Delivereddate, Amountpaid, Pymtmode)

Retailoutlet (Roid, Location, Managerid)

Empdetails (Empid, Empname, Designation, Emailid, Contactno, Worksin, Salary)

Retailstock (Roid, Itemcode, Unitprice, Qtyavailable)

Customer (Custid, Custtype, Custname, Gender, Spouse, Emailid, Address)

Purchasebill (Billid, Roid, Itemcode, Custid, Billamount, Billdate, Quantity)

SELECT Itemcode, Descr, Price FROM Item WHERE Price = (SELECT MAX(Price) From Item WHERE Price < (SELECT Max(Price) FROM Item));

Query Result

ITEMCODE	DESCR	PRICE
I1010	Intel C2D Processor	6500

1 row(s) selected

Expected Result

ITEMCODE	DESCR	PRICE
I1010	Intel C2D Processor	6500

Congratulations !!! Your query is correct.

Collaborative Assignment 97

This assignment has to be done in Eclipse environment

Display **EmpId**, **EmpName** and **Designation** for Employees who are managers in RetailOutlet. For the given requirement, query using join can be written as follows:

```
SELECT EmpId, EmpName, Designation
FROM EmpDetails
INNER JOIN RetailOutlet
ON EmpId = ManagerId
```

Write a query for the same requirement using an Independent Subquery without using Joins.

SELECT EmpId, EmpName, Designation FROM EmpDetails WHERE EmpId IN (SELECT ManagerId FROM RetailOutlet);

Assignment 98 : Mandatory

Display the ename and job of the employees who own vehicle.

Database structure

Dept (Deptno, Dname, Loc)

Emp (Empno, Ename, Job, Mgr, Hiredate, Sal, Comm, Deptno)

Vehicle (Vehicleid, Vehiclename)

Empvehicle (Empno, Vehicleid)

SELECT e.Ename, e.Job FROM Emp e INNER JOIN Empvehicle ev ON e.Empno = ev.Empno INNER JOIN Vehicle v ON ev.Vehicleid = v.Vehicleid WHERE v.Vehicleid IS NOT NULL;

Query Result

ENAME	JOB
JIM	MANAGER
BLAKE	MANAGER
SCOTT	ANALYST
JACK	PRESIDENT
FORD	ANALYST

5 row(s) selected

Expected Result

ENAME	JOB
JIM	MANAGER
BLAKE	MANAGER
SCOTT	ANALYST
JACK	PRESIDENT
FORD	ANALYST

Congratulations !!! Your query is correct.

Assignment 99 : Mandatory

Display the name of the employee who is drawing maximum salary.

Database structure

Dept (Deptno, Dname, Loc)

Emp (Empno, Ename, Job, Mgr, Hiredate, Sal, Comm, Deptno)

Vehicle (Vehicleid, Vehiclename)

Empvehicle (Empno, Vehicleid)

SELECT Ename FROM Emp WHERE Sal = (SELECT MAX(Sal) FROM Emp);

Query Result

ENAME
JACK

1 row(s) selected

Expected Result

ENAME
JACK

Congratulations !!! Your query is correct.

Assignment 100 : Mandatory

Identify the vehicle which is purchased by the maximum number of employees. Display empno and ename of the employees who have purchased the identified vehicles.

Database structure

Dept (Deptno, Dname, Loc)

Emp (Empno, Ename, Job, Mgr, Hiredate, Sal, Comm, Deptno)

Vehicle (Vehicleid, Vehiclename)

Empvehicle (Empno, Vehicleid)

SELECT Empno, Ename FROM Emp WHERE Empno IN (SELECT ev.Empno FROM Empvehicle ev INNER JOIN Empvehicle evp ON ev.Vehicleid = evp.Vehicleid WHERE evp.Empno <> ev.Empno GROUP BY ev.Empno);

Query Result

EMPNO	ENAME
7698	BLAKE
7839	JACK

2 row(s) selected

Expected Result

EMPNO	ENAME
7698	BLAKE
7839	JACK

Congratulations !!! Your query is correct.

Assignment 102 : Mandatory

Display the itemcode, descr and qdate for those items which are quoted below the maximum quoted price on the same day.

Database structure

Item (Itemcode, Itemtype, Descr, Price, Reorderlevel, Qtyonhand, Category)

Quotation (Quotationid, Sname, Itemcode, Quotedprice, Qdate, Qstatus)

Orders (Orderid, Quotationid, Qtyordered, Orderdate, Status, Pymtdate, Delivereddate, Amountpaid, Pymtmode)

Retailoutlet (Roid, Location, Managerid)

Empdetails (Empid, Empname, Designation, Emailid, Contactno, Worksin, Salary)

Retailstock (Roid, Itemcode, Unitprice, Qtyavailable)

Customer (Custid, Custtype, Custname, Gender, Spouse, Emailid, Address)

Purchasebill (Billid, Roid, Itemcode, Custid, Billamount, Billdate, Quantity)

```
SELECT i.Itemcode, i.Descr, q.Qdate FROM Item i INNER JOIN Quotation q ON i.Itemcode = q.Itemcode
WHERE q.Quotedprice < (SELECT MAX(qp.Quotedprice) FROM Quotation qp WHERE qp.Qdate = q.Qdate
AND qp.Quotationid <> q.Quotationid);
```

Query Result

ITEMCODE	DESCR	QDATE
I1002	Best Rice	16-Jun-15
I1002	Best Rice	16-Jun-15
I1005	Levis T-Shirt	15-Jun-15
I1009	Microsoft Mouse	25-Nov-14
I1012	500GB Hard disk	15-Jan-15

5 row(s) selected

Expected Result

ITEMCODE	DESCR	QDATE
I1009	Microsoft Mouse	25-Nov-14
I1012	500GB Hard disk	15-Jan-15
I1005	Levis T-Shirt	15-Jun-15
I1002	Best Rice	16-Jun-15
I1002	Best Rice	16-Jun-15

Congratulations !!! Your query is correct.