

### Assignment 103 : Mandatory

Identify purchase bills in which the bill amount is less than or equal to the average bill amount of all the items purchased in the same retail outlet. Display billid and itemcode for the same.

---

#### 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 Billid, Itemcode FROM Purchasebill WHERE Billamount <= (SELECT AVG(Billamount) FROM Purchasebill);
```

#### Query Result

BILLID	ITEMCODE
5001	I1002
5002	I1001
5003	I1004
5004	I1003
5005	I1002
5006	I1004
5007	I1013
5008	I1007

8 row(s) selected

#### Expected Result

BILLID	ITEMCODE
5001	I1002
5002	I1001
5003	I1004
5004	I1003
5005	I1002
5006	I1004
5007	I1013
5008	I1007

Congratulations !!! Your query is correct.

## Assignment 104 : Mandatory

Identify the supplier who has submitted the quotation for an item with the quoted price, less than the maximum quoted price submitted by all other suppliers, for the same item. Display sname, itemcode and item description for the identified supplier. Do not display duplicate records.

---

### Database structure

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

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

Orders (Orderid, Quotationid, Qtyordered, Orderdate, Status, Pymtdatetime, 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 q.Sname, q.Itemcode, i.Descr FROM Quotation q INNER JOIN Item i ON q.Itemcode = i.Itemcode WHERE q.Quotedprice < (SELECT MAX(qp.Quotedprice) FROM Quotation qp WHERE q.Itemcode = qp.Itemcode AND q.Sname <> qp.Sname);
```

### Query Result

SNAME	ITEMCODE	DESCR
EBATs	I1010	Intel C2D Processor
Shop Zilla	I1005	Levis T-Shirt
VV Electronics	I1009	Microsoft Mouse
EBATs	I1008	Xbox gamepad
Giant Store	I1012	500GB Hard disk

5 row(s) selected

### Expected Result

Congratulations !!! Your query is correct.

## Assignment 105 : Mandatory

The payroll department requires the details of those employees who are getting the highest salary in each designation. Display empid, empname, designation and salary as per the given requirement.

---

### 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 e.Empid, e.Empname, e.Designation, e.Salary FROM Empdetails e WHERE e.Salary = (SELECT  
MAX(ep.Salary) FROM Empdetails ep WHERE e.Designation = ep.Designation);
```

Query Result

EMPID	EMPNAME	DESIGNATION	SALARY
1001	George	Administrator	6000
1002	Kevin	Manager	6500
1004	Allen	Super Manager	9000
1005	Peter	Administrator	6000
1006	John	Manager	6500
1009	Henry	Billing Staff	5000
1013	Clara	Security	2000
1014	Michael	Security	2000

8 row(s) selected

Expected Result

EMPID	EMPNAME	DESIGNATION	SALARY
1001	George	Administrator	6000
1002	Kevin	Manager	6500
1004	Allen	Super Manager	9000
1005	Peter	Administrator	6000
1006	John	Manager	6500
1009	Henry	Billing Staff	5000
1013	Clara	Security	2000
1014	Michael	Security	2000

Congratulations !!! Your query is correct.

#### Assignment 106 : Mandatory

Display the customer id and customer name of those customers who have not purchased at all from any retail outlet. (Use Exists/Not Exists)

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 c.Custid, c.Custname FROM Customer c WHERE NOT EXISTS (SELECT 1 FROM Purchasebill p WHERE c.Custid = p.Custid);

#### Query Result

CUSTID	CUSTNAME
2009	Christina
2010	Megan
2006	Rachel

3 row(s) selected

#### Expected Result

CUSTID	CUSTNAME
2009	Christina
2010	Megan
2006	Rachel

Congratulations !!! Your query is correct.

#### Assignment 108 : Optional

Display the customer id and customer name of those customers who have purchased at least once from any retail outlet.

#### 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 c.Custid, c.Custname FROM Customer c INNER JOIN Purchasebill p ON c.Custid = p.Custid WHERE p.Roid IS NOT NULL;

Query Result	Expected Result																																
<table> <tr> <th>CUSTID</th><th>CUSTNAME</th></tr> <tr><td>2003</td><td>Sam</td></tr> <tr><td>2002</td><td>Jason</td></tr> <tr><td>2005</td><td>Nancy</td></tr> <tr><td>2004</td><td>Susan</td></tr> <tr><td>2008</td><td>Thomas</td></tr> <tr><td>2007</td><td>Dexter</td></tr> <tr><td>2001</td><td>John</td></tr> </table> <p>7 row(s) selected</p>	CUSTID	CUSTNAME	2003	Sam	2002	Jason	2005	Nancy	2004	Susan	2008	Thomas	2007	Dexter	2001	John	<table> <tr> <th>CUSTID</th><th>CUSTNAME</th></tr> <tr><td>2001</td><td>John</td></tr> <tr><td>2002</td><td>Jason</td></tr> <tr><td>2003</td><td>Sam</td></tr> <tr><td>2005</td><td>Nancy</td></tr> <tr><td>2004</td><td>Susan</td></tr> <tr><td>2007</td><td>Dexter</td></tr> <tr><td>2008</td><td>Thomas</td></tr> </table>	CUSTID	CUSTNAME	2001	John	2002	Jason	2003	Sam	2005	Nancy	2004	Susan	2007	Dexter	2008	Thomas
CUSTID	CUSTNAME																																
2003	Sam																																
2002	Jason																																
2005	Nancy																																
2004	Susan																																
2008	Thomas																																
2007	Dexter																																
2001	John																																
CUSTID	CUSTNAME																																
2001	John																																
2002	Jason																																
2003	Sam																																
2005	Nancy																																
2004	Susan																																
2007	Dexter																																
2008	Thomas																																
<p>Congratulations !!! Your query is correct.</p>																																	

Assignment 109 : Optional

Display the empno and ename of all those employees whose salary is greater than the average salary of all employees working in their departments.

Database structure

Database structure

Dept (Deptno, Dname, Loc)

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

Vehicle (Vehicleid, Vehiclename)

Empvehicle (Empno, Vehicleid)

```
SELECT e.Empno, e.Ename FROM Emp e WHERE e.Sal > (SELECT AVG(ep.Sal) FROM Emp ep WHERE e.Deptno = ep.Deptno);
```

Query Result	Expected Result																												
<table> <tr> <th>EMPNO</th><th>ENAME</th></tr> <tr> <td>7499</td><td>ALLEN</td></tr> <tr> <td>7566</td><td>JIM</td></tr> <tr> <td>7698</td><td>BLAKE</td></tr> <tr> <td>7788</td><td>SCOTT</td></tr> <tr> <td>7839</td><td>JACK</td></tr> <tr> <td>7902</td><td>FORD</td></tr> </table>	EMPNO	ENAME	7499	ALLEN	7566	JIM	7698	BLAKE	7788	SCOTT	7839	JACK	7902	FORD	<table> <tr> <th>EMPNO</th><th>ENAME</th></tr> <tr> <td>7499</td><td>ALLEN</td></tr> <tr> <td>7566</td><td>JIM</td></tr> <tr> <td>7698</td><td>BLAKE</td></tr> <tr> <td>7788</td><td>SCOTT</td></tr> <tr> <td>7839</td><td>JACK</td></tr> <tr> <td>7902</td><td>FORD</td></tr> </table>	EMPNO	ENAME	7499	ALLEN	7566	JIM	7698	BLAKE	7788	SCOTT	7839	JACK	7902	FORD
EMPNO	ENAME																												
7499	ALLEN																												
7566	JIM																												
7698	BLAKE																												
7788	SCOTT																												
7839	JACK																												
7902	FORD																												
EMPNO	ENAME																												
7499	ALLEN																												
7566	JIM																												
7698	BLAKE																												
7788	SCOTT																												
7839	JACK																												
7902	FORD																												
6 row(s) selected																													
Congratulations !!! Your query is correct.																													

Assignment 110 : Optional

Remove vehicle allocation from employees who have highest salary in their departments.

Database structure

Database structure

Dept (Deptno, Dname, Loc)

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

Vehicle (Vehicleid, Vehiclename)

Empvehicle (Empno, Vehicleid)

DELETE FROM Empvehicle WHERE Empno IN (SELECT e.Empno FROM Emp e WHERE e.Sal = (SELECT MAX(ep.Sal) FROM Emp ep WHERE e.Deptno = ep.Deptno))

Query Result	Expected Result								
<table> <tr> <th>EMPNO</th><th>VEHICLEID</th></tr> <tr> <td>7566</td><td>2001</td></tr> </table> <p>4 rows deleted.</p>	EMPNO	VEHICLEID	7566	2001	<table> <tr> <th>EMPNO</th><th>VEHICLEID</th></tr> <tr> <td>7566</td><td>2001</td></tr> </table>	EMPNO	VEHICLEID	7566	2001
EMPNO	VEHICLEID								
7566	2001								
EMPNO	VEHICLEID								
7566	2001								
<p>Congratulations !!! Your query is correct.</p>									

### Assignment 111 : Optional

Update the salary of employees with their department's average salary.

Database structure

Database structure

Dept (Deptno, Dname, Loc)

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

Vehicle (Vehicleid, Vehiclename)

Empvehicle (Empno, Vehicleid)

---

```
UPDATE Emp e SET e.Sal = (SELECT AVG(ep.Sal) FROM Emp ep WHERE e.Deptno = ep.Deptno);
```



### Query Result

EMPNO	ENAME	JOB	MGR
7369	SMITH	CLERK	7902
7499	ALLEN	SALESMAN	7698
7521	WARD	SALESMAN	7698
7566	JIM	MANAGER	7839
7654	MARTIN	SALESMAN	7698
7698	BLAKE	MANAGER	7839
7782	CLARK	MANAGER	7839
7788	SCOTT	ANALYST	7566
7839	JACK	PRESIDENT	NULL
7844	TURNER	SALESMAN	7698
7876	ADAMS	CLERK	7788
7900	JAMES	CLERK	7698

7902	FORD	ANALYST	7566
7934	MILLER	CLERK	7782

14 rows updated.

### Expected Result

EMPNO	ENAME	JOB	MGR
7369	SMITH	CLERK	7902
7499	ALLEN	SALESMAN	7698
7521	WARD	SALESMAN	7698
7566	JIM	MANAGER	7839
7654	MARTIN	SALESMAN	7698
7698	BLAKE	MANAGER	7839
7782	CLARK	MANAGER	7839
7788	SCOTT	ANALYST	7566
7839	JACK	PRESIDENT	NULL
7844	TURNER	SALESMAN	7698
7876	ADAMS	CLERK	7788
7900	JAMES	CLERK	7698

7902	FORD	ANALYST	7566
7934	MILLER	CLERK	7782

Congratulations !!! Your query is correct.