

```
/* 1 */
```

```
SELECT 'Steady' AS CustomerType, firstname, lastname, birthdate, phonenumber, email
FROM person INNER JOIN customer on
    person.personid = customer.person_personid RIGHT JOIN steady ON
customer.CUSTOMERID = steady.CUSTOMER_CUSTOMERID
UNION ALL
SELECT 'Premier' AS CustomerType, firstname, lastname, birthdate, phonenumber, 'N/A' as
email FROM person INNER JOIN customer on
    person.personid = customer.person_personid RIGHT JOIN premier on
customer.CUSTOMERID = premier.CUSTOMER_CUSTOMERID;
```

SQL 2 [jdbc:mysql://localhost:33...] x

Connection: jdbc:mysql://localhost:3306/mysql?zeroDateTimeBehavior=convertToNull [root on Default schema]

```

1  /* 1 */
2  SELECT 'Steady' AS CustomerType, firstname, lastname, birthdate, phonenumber, email FROM person INNER JOIN customer on
3      person.personid = customer.person_personid RIGHT JOIN steady ON customer.CUSTOMERID = steady.CUSTOMER_CUSTOMERID
4  UNION ALL
5  SELECT 'Premier' AS CustomerType, firstname, lastname, birthdate, phonenumber, 'N/A' as email FROM person INNER JOIN customer on
6      person.personid = customer.person_personid RIGHT JOIN premier on customer.CUSTOMERID = premier.CUSTOMER_CUSTOMERID;
7

```

SELECT 'Steady' AS Custom... x

Max. rows: 100 | Fetched Rows: 15 | Matching Rows:

#	CustomerType	firstname	lastname	birthdate	phonenumber	email
1	Steady	John	Doe	1975-12-30	652-734-2345	johndoe@gmail.com
2	Steady	Carlos	Lomeli	1995-12-29	942-434-4345	carloslomeli@gmail.com
3	Steady	John	Davis	1975-12-30	352-734-9345	johndavis@gmail.com
4	Steady	Ray	Chin	1805-12-29	631-835-7345	raychin@gmail.com
5	Steady	Dave	Brown	2000-12-29	928-734-5345	davebrown@gmail.com
6	Steady	Luke	Skywalker	2005-12-29	326-536-4345	lukeskywalker@gmail.com
7	Steady	Turk	Bryant	1995-7-29	252-111-2335	turkbryant@gmail.com
8	Steady	Lebron	James	2004-12-29	156-234-2344	lebronjames@gmail.com
9	Steady	Elliot	Reid	1944-12-29	156-234-2324	elliotreid@gmail.com
10	Steady	Matt	Fox	1952-8-29	156-234-2944	mattfox@gmail.com
11	Steady	Patrick	Ly	1990-11-19	156-234-2844	patrickly@gmail.com
12	Premier	Pat	Chin	1991-11-19	156-234-2844	N/A
13	Premier	Carl	Lewis	1992-11-19	156-334-2844	N/A
14	Premier	John	Riddle	1993-11-19	156-274-2844	N/A
15	Premier	Tom	VolDEMort	1940-11-19	156-294-2844	N/A

```
/* 2 */
```

```
SELECT customer.customerid, serviceappointment_appdate AS DateVisit,
SUM(totalcostofservice) AS TotalCostForVisit FROM customer
    INNER JOIN serviceappointment ON customer.CUSTOMERID =
serviceappointment.CUSTOMER_CUSTOMERID INNER JOIN maintenancevisitororder ON
    appdate = maintenancevisitororder.SERVICEAPPOINTMENT_APPDATE GROUP BY
customer.customerid, SERVICEAPPOINTMENT_APPDATE;
```

```

10  /* 2 */
11  SELECT customer.customerid, serviceappointment_appdate AS DateVisit, SUM(totalcostofservice) AS TotalCostForVisit FROM customer
12  INNER JOIN serviceappointment ON customer.CUSTOMERID = serviceappointment.CUSTOMER_CUSTOMERID INNER JOIN maintenancevisitorder ON
13  appdate = maintenancevisitorder.SERVICEAPPOINTMENT_APPDATE GROUP BY customer.customerid, SERVICEAPPOINTMENT_APPDATE;
14

```

SELECT customer.customerid... X

Max. rows: 100 | Fetched Rows: 22 | Matching Rows:

#	customerid	DateVisit	TotalCostForVisit
1	C000	2015-04-13	116.0
2	C000	2016-04-30	41.0
3	C001	2015-04-11	75.0
4	C001	2016-04-13	75.0
5	C001	2017-04-13	150.0
6	C002	2016-04-12	100.0
7	C003	2017-04-14	60.0
8	C004	2016-12-13	260.0
9	C004	2017-04-23	260.0
10	C005	2015-04-13	116.0
11	C006	2016-03-13	30.0
12	C006	2017-05-13	40.0
13	C007	2015-06-13	50.0
14	C008	2017-04-13	150.0
15	C009	2015-08-13	60.0
16	C010	2015-07-13	75.0
17	C010	2016-08-13	75.0
18	C011	2017-01-13	85.0
19	C012	2017-02-13	260.0
20	C013	2016-09-13	215.0

/\* 4 \*/

SELECT m.EMPLOYEE\_EMPLOYEEID from mechanic m INNER JOIN certification c on  
m.EMPLOYEE\_EMPLOYEEID = c.MECHANIC\_EMPLOYEE\_EMPLOYEEID  
INNER JOIN skill s on c.SKILL\_SKILLNAME = s.SKILLNAME GROUP BY  
m.EMPLOYEE\_EMPLOYEEID HAVING COUNT(s.SKILLNAME) > 2;

```

15  /* 4 */
16  SELECT m.EMPLOYEE_EMPLOYEEID from mechanic m INNER JOIN certification c on m.EMPLOYEE_EMPLOYEEID = c.MECHANIC_EMPLOYEE_EMPLOYEEID
17  INNER JOIN skill s on c.SKILL_SKILLNAME = s.SKILLNAME GROUP BY m.EMPLOYEE_EMPLOYEEID HAVING COUNT(s.SKILLNAME) > 2;
18

```

SELECT m.EMPLOYEE\_EMPLOYEEID... X

Max. rows: 100 | Fetched Rows: 8 | Matching Rows:

#	EMPLOYEE_EMPLOYEEID
1	E000
2	E001
3	E002
4	E003
5	E004
6	E005
7	E006
8	E010

/\* 6 \*/

SELECT sq.packagename, sq.TotalCost, m2.itemname FROM (SELECT packagename,  
packageid, SUM(cost) AS TotalCost FROM package INNER JOIN maintenanceitem ON  
package.PACKAGEID = maintenanceitem.PACKAGE\_PACKAGEID GROUP BY  
packagename, packageid) AS sq INNER JOIN maintenanceitem m2  
ON m2.PACKAGE\_PACKAGEID = sq.packageid;

SQL 2 [jdbc:mysql://localhost:3306/] x

Connection: jdbc:mysql://localhost:3306/mysql?zeroDateTimeBehavior=convertToNull [root on Default schema]

```

20 /* 6 */
21 SELECT sq.packagename, sq.TotalCost, m2.itemname FROM (SELECT packagename, packageid, SUM(cost) AS TotalCost FROM package INNER JOIN maintenanceitem ON
22 package.PACKAGEID = maintenanceitem.PACKAGE_PACKAGEID GROUP BY packagename, packageid) AS sq INNER JOIN maintenanceitem m2
23 ON m2.PACKAGE PACKAGEID = sq.packageid:

```

SELECT sq.packagename, sq...

Max. rows: 100 | Fetched Rows: 35

#	packagename	TotalCost	itemname
1	Air Systems		41.0 A/C unit
2	Air Systems		41.0 A/C recharge
3	Basic		70.0 Oil Change
4	Basic		70.0 Tire rotation
5	Brakes		125.0 Brakes
6	Brakes		125.0 Brake pad change
7	Brakes		125.0 Brake Fluid Drain
8	Brakes		125.0 Drum Replacement
9	Bronze		75.0 Fuel System
10	Bronze		75.0 Lucas Additive
11	Engine		180.0 Engine
12	Engine		180.0 Engine Clean
13	Engine		180.0 Engine Ring Replacement
14	Fluid Exchange		50.0 Transmission Fluid Drain
15	Fluid Exchange		50.0 Transmission Fluid Filter
16	Gold		215.0 Tire Change
17	Gold		215.0 A/C unit
18	Gold		215.0 Engine Ring Replacement
19	Gold		215.0 Car Wash
20	Gold		215.0 Brakes
21	Lower External		75.0 Tire Change
22	Lower External		75.0 Rim Clean
23	Oil Service		60.0 Oil Change
24	Oil Service		60.0 Oil Drain
25	Routine		75.0 CheckUp
26	Routine		75.0 Wind Shield
27	Silver		75.0 Axle Service
28	Silver		75.0 Shocks
29	Suspension		85.0 Axle Service
30	Suspension		85.0 Shocks
31	Suspension		85.0 Struts
32	Transmission		260.0 Power Train
33	Transmission		260.0 Drive Train
34	Tune-Up		80.0 Lucas Additive
35	Tune-Up		80.0 HeadLight Clean

/\* 8 \*/

SELECT firstname, lastname, birthdate, customerid, loyaltypoints FROM person p INNER JOIN customer c ON p.PERSONID = c.PERSON\_PERSONID INNER JOIN steady s ON c.CUSTOMERID = s.CUSTOMER\_CUSTOMERID ORDER BY loyaltypoints DESC;

```

25 /* 8 */
26 SELECT firstname, lastname, birthdate, customerid, loyaltypoints FROM person p INNER JOIN customer c
27 ON p.PERSONID = c.PERSON_PERSONID INNER JOIN steady s ON c.CUSTOMERID = s.CUSTOMER_CUSTOMERID ORDER BY loyaltypoints DESC;
28
29

```

SELECT firstname, lastnam...

Max. rows: 100 | Fetched Rows: 11 | Matching Rows:

#	firstname	lastname	birthdate	customerid	loyaltypoints
1	Dave	Brown	2000-12-29	C004	640
2	John	Davis	1975-12-30	C002	500
3	Carlos	Lomeli	1995-12-29	C001	400
4	Luke	Skywalker	2005-12-29	C005	390
5	John	Doe	1975-12-30	C000	340
6	Turk	Bryant	1995-7-29	C006	340
7	Lebron	James	2004-12-29	C007	340
8	Ray	Chin	1805-12-29	C003	210
9	Elliot	Reid	1944-12-29	C008	140
10	Patrick	Ly	1990-11-19	C010	80
11	Matt	Fox	1952-8-29	C009	20

/\* 15 \*/

SELECT e.EMPLOYEEID, 'Technician' AS Occupation FROM employee e INNER JOIN technician t ON e.EMPLOYEEID = t.employee\_employeeid WHERE e.EMPLOYEEID IN (SELECT e.EMPLOYEEID FROM employee e INNER JOIN technician t ON e.EMPLOYEEID = t.EMPLOYEE\_EMPLOYEEID) UNION ALL

```

SELECT e.EMPLOYEEID, 'Mechanic' AS Occupation FROM employee e INNER JOIN
mechanic m ON e.EMPLOYEEID = m.employee_employeeid
WHERE e.EMPLOYEEID IN (SELECT e.EMPLOYEEID FROM employee e INNER
JOIN mechanic m ON e.EMPLOYEEID = m.EMPLOYEE_EMPLOYEEID);

```

```

29  /* 15 */
30  SELECT e.EMPLOYEEID, 'Technician' AS Occupation FROM employee e INNER JOIN technician t ON e.EMPLOYEEID = t.employee_employeeid
31      WHERE e.EMPLOYEEID IN (SELECT e.EMPLOYEEID FROM employee e INNER JOIN technician t ON e.EMPLOYEEID = t.EMPLOYEE_EMPLOYEEID)
32  UNION ALL
33  SELECT e.EMPLOYEEID, 'Mechanic' AS Occupation FROM employee e INNER JOIN mechanic m ON e.EMPLOYEEID = m.employee_employeeid
34      WHERE e.EMPLOYEEID IN (SELECT e.EMPLOYEEID FROM employee e INNER JOIN mechanic m ON e.EMPLOYEEID = m.EMPLOYEE_EMPLOYEEID);
35

```

#	EMPLOYEEID	Occupation
1	E002	Technician
2	E008	Technician
3	E009	Technician
4	E010	Technician
5	E011	Technician
6	E000	Mechanic
7	E001	Mechanic
8	E002	Mechanic
9	E003	Mechanic
10	E004	Mechanic
11	E005	Mechanic
12	E006	Mechanic
13	E007	Mechanic
14	E010	Mechanic

```

/* 17 */
SELECT itemname FROM maintenanceitem WHERE package_packageid IS NULL;

```

```

37  /* 17 */
38  SELECT itemname FROM maintenanceitem WHERE package_packageid IS NULL;
39

```

#	itemname
1	Car Wash
2	Car Wax
3	Brake Fluid Change
4	Rebuild Engine
5	Tire Rotation

```

/* 18 */
-- A mechanic can have a list of certifications
SELECT employee_employeeid, skillname, dateearned FROM mechanic m INNER
JOIN certification c ON

```

```

m.EMPLOYEE_EMPLOYEEID = c.MECHANIC_EMPLOYEE_EMPLOYEEID INNER
JOIN skill s ON s.SKILLNAME = c.SKILL_SKILLNAME;

```

```

41  /* 18 */
42  -- A mechanic can have a list of certifications
43  SELECT employee_employeeid, skillname, dateearned FROM mechanic m INNER JOIN certification c ON
44  m.EMPLOYEE_EMPLOYEEID = c.MECHANIC_EMPLOYEE_EMPLOYEEID INNER JOIN skill s ON s.SKILLNAME = c.SKILL_SKILLNAME;

```

SELECT employee\_employeeid... x

Max. rows: 100 | Fetched Rows: 40 |

#	employee_employeeid	skillname	dateearned
1	E000	air conditioning	2014-03-19
2	E001	air conditioning	2016-05-11
3	E002	air conditioning	2016-05-11
4	E003	air conditioning	2016-05-11
5	E004	air conditioning	2016-05-11
6	E005	air conditioning	2016-05-11
7	E006	air conditioning	2016-05-10
8	E000	brakes	2014-06-19
9	E001	brakes	2016-05-11
10	E002	brakes	2016-05-11
11	E000	clean	2010-01-15
12	E001	clean	2010-01-15
13	E002	clean	2010-01-15
14	E003	clean	2010-01-15
15	E004	clean	2010-01-15
16	E005	clean	2010-01-15
17	E006	clean	2010-01-15
18	E010	clean	2010-01-15
19	E000	engine	2014-04-19
20	E001	engine	2016-05-11
21	E010	engine	2016-04-11
22	E000	front end	2014-04-19
23	E006	front end	2016-05-11
24	E000	fuel system	2014-04-19
25	E000	head machining	2013-04-19
26	E000	hoist operation	2013-04-25
27	E006	oil change	2016-05-11
28	E010	oil change	2016-04-11
29	E000	ring replacement	2013-05-19
30	E000	smog	2013-06-19
31	E004	smog	2016-05-11
32	E005	smog	2016-05-11
33	E003	suspension	2016-10-11
34	E004	suspension	2016-10-11
35	E005	suspension	2016-10-11

```

-- Technicians receive a Salary, Mechanics get paid on an hourly basis
SELECT e.EMPLOYEEID, 'Salary' AS TypeOfPayment FROM employee e inner join
technician t ON
e.EMPLOYEEID = t.EMPLOYEE_EMPLOYEEID
UNION
SELECT e.EMPLOYEEID, 'Hourly Rate' AS TypeOfPayment FROM employee e inner
join mechanic m ON
e.EMPLOYEEID = m.EMPLOYEE_EMPLOYEEID;

```

```

46 -- Technicians receive a Salary, Mechanics get paid on an hourly basis
47 SELECT e.EMPLOYEEID, 'Salary' AS TypeOfPayment FROM employee e inner join technician t ON
48 e.EMPLOYEEID = t.EMPLOYEE_EMPLOYEEID
49 UNION
50 SELECT e.EMPLOYEEID, 'Hourly Rate' AS TypeOfPayment FROM employee e inner join mechanic m ON
51 e.EMPLOYEEID = m.EMPLOYEE_EMPLOYEEID;
52

```

SELECT e.EMPLOYEEID, 'Sal...' X

Max. rows: 100 | Fetched Rows: 14

#	EMPLOYEEID	TypeOfPayment
1	E002	Salary
2	E008	Salary
3	E009	Salary
4	E010	Salary
5	E011	Salary
6	E000	Hourly Rate
7	E001	Hourly Rate
8	E002	Hourly Rate
9	E003	Hourly Rate
10	E004	Hourly Rate
11	E005	Hourly Rate
12	E006	Hourly Rate
13	E007	Hourly Rate
14	E010	Hourly Rate

-- Estimated Yearly Mileage must be 18 year-olds or older  
 SELECT estimatedmileage FROM vehicle;

```

53 -- Estimated Yearly Mileage must be 18 year-olds or older
54 SELECT estimatedMileagePerYear FROM vehicle;
55

```

SELECT estimatedMileagePe... X

Max. rows: 100 | Fetched Rows: 15

#	estimatedMileagePerYear
1	10,000
2	15,000
3	9,000
4	10,000
5	11,000
6	12,000
7	5,000
8	5,000
9	11,000
10	10,000
11	9,000
12	10,000
13	25,000
14	20,000
15	8,000

---







