

Module-5

SELECT Statement Problems

For event requests, list the event number, event date (eventrequest.dateheld), and count of the event plans. Only include event requests in the result if the event request has more than one related event plan with a work date in December 2013.

```
SELECT
  er.EventNo,
  er.DateHeld,
  count(*) AS EventPlanCount
FROM EventRequest AS er
INNER JOIN EventPlan AS ep ON er.EventNo = ep.EventNo
WHERE ep.WorkDate BETWEEN '2013-12-01' AND '2013-12-31'
GROUP BY er.EventNo
HAVING EventPlanCount > 1;
```

```
mysql> SELECT
->   er.EventNo,
->   er.DateHeld,
->   count(*) AS EventPlanCount
-> FROM EventRequest AS er
-> INNER JOIN EventPlan AS ep ON er.EventNo = ep.EventNo
-> WHERE ep.WorkDate BETWEEN '2013-12-01' AND '2013-12-31'
-> GROUP BY er.EventNo
-> HAVING EventPlanCount > 1;
+-----+-----+-----+
| EventNo | DateHeld   | EventPlanCount |
+-----+-----+-----+
| E106    | 2013-12-12 |                2 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

List the plan number, event number, work date, and activity of event plans meeting the following two conditions: (1) the work date is in December 2013 and (2) the event is held in the “Basketball arena”. Your query must not use the facility number (“F101”) of the basketball arena in the WHERE clause. Instead, you should use a condition on the FacName column for the value of “Basketball arena”.

```
SELECT
  ep.PlanNo,
  ep.EventNo,
  ep.WorkDate,
  ep.Activity
FROM EventPlan AS ep
INNER JOIN EventRequest AS er ON ep.EventNo = er.EventNo
INNER JOIN Facility AS f ON er.FacNo = f.FacNo
WHERE (f.FacName = 'Basketball arena') AND (ep.WorkDate BETWEEN '2013-12-01' AND '2013-12-31');
```

```
mysql> SELECT
->   ep.PlanNo,
->   ep.EventNo,
->   ep.WorkDate,
->   ep.Activity
-> FROM EventPlan AS ep
-> INNER JOIN EventRequest AS er ON ep.EventNo = er.EventNo
-> INNER JOIN Facility AS f ON er.FacNo = f.FacNo
-> WHERE (f.FacName = 'Basketball arena') AND (ep.WorkDate BETWEEN '2013-12-01' AND '2013-12-31');
```

PlanNo	EventNo	WorkDate	Activity
P102	E105	2013-12-05	Operation
P103	E106	2013-12-12	Operation
P349	E106	2013-12-12	Cleanup

```
3 rows in set (0.00 sec)
```

List the event number, event date, status, and estimated cost of events where there is an event plan managed by Mary Manager and the event is held in the basketball arena in the period October 1 to December 31, 2013. Your query must not use the facility number ("F101") of the basketball arena or the employee number ("E101") of "Mary Manager" in the WHERE clause. Thus, the WHERE clause should not have conditions involving the facility number or employee number compared to constant values.

```
SELECT
  er.EventNo,
  er.DateHeld,
  er.DateReq,
  er.EstCost,
  er.Status
FROM EventRequest AS er
INNER JOIN EventPlan AS ep ON er.EventNo = ep.EventNo
INNER JOIN Employee AS e ON ep.EmpNo = e.EmpNo
INNER JOIN Facility AS f ON er.FacNo = f.FacNo
WHERE (f.FacName = 'Basketball arena') AND (er.DateHeld BETWEEN '2013-10-01' AND
'2013-12-31') AND (e.EmpName = 'Mary Manager');
```

```
mysql> SELECT
->   er.EventNo,
->   er.DateHeld,
->   er.DateReq,
->   er.EstCost,
->   er.Status
-> FROM EventRequest AS er
-> INNER JOIN EventPlan AS ep ON er.EventNo = ep.EventNo
-> INNER JOIN Employee AS e ON ep.EmpNo = e.EmpNo
-> INNER JOIN Facility AS f ON er.FacNo = f.FacNo
-> WHERE (f.FacName = 'Basketball arena') AND (er.DateHeld BETWEEN '2013-10-01' AND '2013-12-31') AND (e.EmpName = 'Mary Manager');
+-----+-----+-----+-----+-----+
| EventNo | DateHeld | DateReq | EstCost | Status |
+-----+-----+-----+-----+-----+
| E106    | 2013-12-12 | 2013-07-28 | 2000.00 | Approved |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

List the plan number, line number, resource name, number of resources (eventplanline.number), location name, time start, and time end where the event is held at the basketball arena, the event plan has activity of activity of "Operation", and the event plan has a work date in the period October 1 to December 31, 2013. Your query must not use the facility number ("F101") of the basketball arena in the WHERE clause. Instead, you should use a condition on the FacName column for the value of "Basketball arena".

```
SELECT
    epl.PlanNo,
    epl.LineNo,
    epl.NumberFld AS 'Number',
    epl.TimeStart,
    epl.TimeEnd,
    l.LocName AS 'Location name',
    r.ResName AS 'Resource name'
FROM EventPlanLine AS epl
INNER JOIN EventPlan AS ep ON epl.PlanNo = ep.PlanNo
INNER JOIN Location AS l ON epl.LocNo = l.LocNo
INNER JOIN ResourceTbl AS r ON epl.ResNo = r.ResNo
INNER JOIN Facility AS f ON l.FacNo = f.FacNo
WHERE (f.FacName = 'Basketball arena') AND (ep.Activity = 'Operation') AND
    (ep.WorkDate BETWEEN '2013-10-01' AND '2013-12-31')
ORDER BY epl.PlanNo;
```

```
mysql> SELECT
-> epl.PlanNo,
-> epl.LineNo,
-> epl.NumberFld AS 'Number',
-> epl.TimeStart,
-> epl.TimeEnd,
-> l.LocName AS 'Location name',
-> r.ResName AS 'Resource name'
-> FROM EventPlanLine AS epl
-> INNER JOIN EventPlan AS ep ON epl.PlanNo = ep.PlanNo
-> INNER JOIN Location AS l ON epl.LocNo = l.LocNo
-> INNER JOIN ResourceTbl AS r ON epl.ResNo = r.ResNo
-> INNER JOIN Facility AS f ON l.FacNo = f.FacNo
-> WHERE (f.FacName = 'Basketball arena') AND (ep.Activity = 'Operation') AND
-> (ep.WorkDate BETWEEN '2013-10-01' AND '2013-12-31')
-> ORDER BY epl.PlanNo;
```

PlanNo	LineNo	Number	TimeStart	TimeEnd	Location name	Resource name
P102	1	2	2013-12-05 18:00:00	2013-12-05 19:00:00	Locker room	attendant
P102	2	2	2013-12-05 18:00:00	2013-12-05 21:00:00	Gate	attendant
P102	3	4	2013-12-05 19:00:00	2013-12-05 22:00:00	Locker room	nurse
P103	1	2	2013-12-12 18:00:00	2013-12-12 21:00:00	Locker room	attendant
P103	2	4	2013-12-12 18:00:00	2013-12-12 21:00:00	Gate	attendant
P103	3	2	2013-12-12 19:00:00	2013-12-12 22:00:00	Locker room	nurse

6 rows in set (0.00 sec)

Database Modification Problems

Insert a new row into the Facility table with the facility name “Swimming Pool”.

INSERT INTO Facility (FacNo, FacName) VALUES ('F104', 'Swimming Pool');

```
mysql> INSERT INTO Facility (FacNo, FacName) VALUES ('F104', 'Swimming Pool');
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM Facility;
+-----+-----+
| FacNo | FacName          |
+-----+-----+
| F100  | Football stadium |
| F101  | Basketball arena |
| F102  | Baseball field   |
| F103  | Recreation room  |
| F104  | Swimming Pool    |
+-----+-----+
5 rows in set (0.00 sec)
```

Insert a new row in the Location table related to the Facility row in modification problem 1.

The new row should have “Door” for the location name.

INSERT INTO Location (LocNo, FacNo, LocName) VALUES ('L107', 'F104', 'Door');

```
mysql> INSERT INTO Location (LocNo, FacNo, LocName) VALUES ('L107', 'F104', 'Door');
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM Location;
+-----+-----+-----+
| LocNo | FacNo | LocName          |
+-----+-----+-----+
| L100  | F100  | Locker room      |
| L101  | F100  | Plaza            |
| L102  | F100  | Vehicle gate     |
| L103  | F101  | Locker room      |
| L104  | F100  | Ticket Booth     |
| L105  | F101  | Gate             |
| L106  | F100  | Pedestrian gate  |
| L107  | F104  | Door             |
+-----+-----+-----+
8 rows in set (0.01 sec)
```

Insert a new row in the Location table related to the Facility row in modification problem 1.

The new row should have “Locker Room” for the location name.

```
INSERT INTO Location (LocNo, FacNo, LocName) VALUES ('L108', 'F104', 'Locker Room');
```

```
mysql> INSERT INTO Location (LocNo, FacNo, LocName) VALUES ('L108', 'F104', 'Locker Room');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM Location;
```

LocNo	FacNo	LocName
L100	F100	Locker room
L101	F100	Plaza
L102	F100	Vehicle gate
L103	F101	Locker room
L104	F100	Ticket Booth
L105	F101	Gate
L106	F100	Pedestrian gate
L107	F104	Door
L108	F104	Locker Room

```
9 rows in set (0.00 sec)
```

Change the location name of “Door” to “Gate” for the row inserted in modification problem 2.

```
UPDATE Location  
SET LocName = 'Gate'  
WHERE LocNo = 'L107';
```

```
mysql> UPDATE Location  
-> SET LocName = 'Gate'  
-> WHERE LocNo = 'L107';  
Query OK, 1 row affected (0.00 sec)  
Rows matched: 1  Changed: 1  Warnings: 0  
  
mysql> SELECT * FROM Location;  
+-----+-----+-----+  
| LocNo | FacNo | LocName      |  
+-----+-----+-----+  
| L100  | F100  | Locker room  |  
| L101  | F100  | Plaza        |  
| L102  | F100  | Vehicle gate |  
| L103  | F101  | Locker room  |  
| L104  | F100  | Ticket Booth |  
| L105  | F101  | Gate         |  
| L106  | F100  | Pedestrian gate |  
| L107  | F104  | Gate         |  
| L108  | F104  | Locker Room  |  
+-----+-----+-----+  
9 rows in set (0.00 sec)
```

Delete the row inserted in modification problem 3.

```
DELETE FROM Location  
WHERE LocNo = 'L108';
```

```
mysql> DELETE FROM Location  
-> WHERE LocNo = 'L108';  
Query OK, 1 row affected (0.03 sec)  
  
mysql> SELECT * FROM Location;  
+-----+-----+-----+  
| LocNo | FacNo | LocName      |  
+-----+-----+-----+  
| L100  | F100  | Locker room  |  
| L101  | F100  | Plaza        |  
| L102  | F100  | Vehicle gate |  
| L103  | F101  | Locker room  |  
| L104  | F100  | Ticket Booth |  
| L105  | F101  | Gate         |  
| L106  | F100  | Pedestrian gate |  
| L107  | F104  | Gate         |  
+-----+-----+-----+  
8 rows in set (0.00 sec)
```