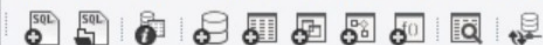




```
1 • CREATE DATABASE SUPPLIER;
2 • USE SUPPLIER;
3 • CREATE TABLE SUPPLIERS(SID BIGINT(5) PRIMARY KEY, SNAME
4 • VARCHAR(20), CITY VARCHAR(20));
5 • INSERT INTO SUPPLIERS VALUES(10001,'ACME WIDGET','BANGALORE');
6 • INSERT INTO SUPPLIERS VALUES(10002,'JOHNS ','KOLKATA');
7 • INSERT INTO SUPPLIERS VALUES(10003,'VIMAL','MUMBAI');
8 • INSERT INTO SUPPLIERS VALUES(10004,'RELIANCE ','DELHI');
9 • SELECT * FROM SUPPLIERS;
10 • CREATE TABLE PARTS(PID BIGINT(5) PRIMARY KEY, PNAME VARCHAR(20),
11 • COLOR VARCHAR(10));
12 • INSERT INTO PARTS VALUES(20001,'BOOK','RED');
13 • INSERT INTO PARTS VALUES(20002,'PEN','RED');
14 • INSERT INTO PARTS VALUES(20003,'PENCIL','GREEN');
15 • INSERT INTO PARTS VALUES(20004,'MOBILE ','GREEN');
16 • INSERT INTO PARTS VALUES(20005,'CHARGER','BLACK');
17 • SELECT * FROM PARTS;
18 • CREATE TABLE CATALOG(SID BIGINT(5), PID BIGINT(5), FOREIGN KEY(SID)
19 • REFERENCES SUPPLIERS(SID), FOREIGN KEY(PID) REFERENCES PARTS(PID),
20 • COST FLOAT(6), PRIMARY KEY(SID, PID));
21 • INSERT INTO CATALOG VALUES(10001,20001,10);
22 • INSERT INTO CATALOG VALUES(10001,20002,10);
23 • INSERT INTO CATALOG VALUES(10001,20003,30);
24 • INSERT INTO CATALOG VALUES(10001,20004,10);
```



```
22 • INSERT INTO CATALOG VALUES(10001,20002,10);
23 • INSERT INTO CATALOG VALUES(10001,20003,30);
24 • INSERT INTO CATALOG VALUES(10001,20004,10);
25 • INSERT INTO CATALOG VALUES(10001,20005,10);
26 • INSERT INTO CATALOG VALUES(10002,20001,10);
27 • INSERT INTO CATALOG VALUES(10002,20002,20);
28 • INSERT INTO CATALOG VALUES(10003,20003,30);
29 • INSERT INTO CATALOG VALUES(10004,20003,40);
30 • SELECT * FROM CATALOG;
31 /* 1 - FIND THE PNAME OF PARTS FOR WHICH THERE IS SOME SUPPLIER. */
32 • SELECT DISTINCT P.PNAME
33   FROM PARTS P, CATALOG C
34   WHERE P.PID = C.PID;
35
36 /* FIND THE SNAME OF SUPPLIERS WHO SUPPLY EVERY PART */
37 • SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM
38   PARTS P WHERE NOT EXISTS (SELECT C.SID FROM CATALOG C WHERE C.SID =
39   S.SID AND C.PID = P.PID));
40
41 /* FIND THE SNAME OF SUPPLIERS WHO SUPPLY EVERY RED PART. */
42 • SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM
43   PARTS P WHERE P.COLOR = 'RED' AND (NOT EXISTS (SELECT C.SID FROM
44   CATALOG C WHERE C.SID = S.SID AND C.PID = P.PID)));
45
```



```
43 PARTS P WHERE P.COLOR = 'RED' AND (NOT EXISTS (SELECT C.SID FROM
44 CATALOG C WHERE C.SID = S.SID AND C.PID = P.PID)));
45
46 /* FIND THE PNAME OF PARTS SUPPLIED BY ACME WIDGET SUPPLIERS AND BY NO ONE ELSE */
47 • SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID
48 = C.PID AND C.SID = S.SID AND S.SNAME = 'ACME WIDGET' AND NOT EXISTS
49 (SELECT * FROM CATALOG C1, SUPPLIERS S1 WHERE P.PID = C1.PID AND
50 C1.SID = S1.SID AND S1.SNAME <> 'ACME WIDGET');
51
52 /* FIND THE SIDS OF SUPPLIERS WHO CHARGE MORE FOR SOME PART THAN THE AVERAGE COST OF THAT PART (AVERAGED OVER
53 ALL THE SUPPLIERS WHO SUPPLY THAT PART).
54 */
55 • SELECT DISTINCT C.SID FROM CATALOG C
56 WHERE C.COST > ( SELECT AVG (C1.COST)
57 FROM CATALOG C1
58 WHERE C1.PID = C.PID );
59
60 /* FOR EACH PART, FIND THE SNAME OF THE SUPPLIER WHO CHARGES THE MOST FOR THAT PART.*/
61 • SELECT P.PID, S.SNAME
62 FROM PARTS P, SUPPLIERS S, CATALOG C
63 WHERE C.PID = P.PID
64 AND C.SID = S.SID
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
```



Limit to 200 rows

```
52  /* FIND THE SIDS OF SUPPLIERS WHO CHARGE MORE FOR SOME PART THAN THE AVERAGE COST OF THAT PART (AVERAGED OVER
53  ALL THE SUPPLIERS WHO SUPPLY THAT PART).
54  */
55  • SELECT DISTINCT C.SID FROM CATALOG C
56  WHERE C.COST > ( SELECT AVG (C1.COST)
57  FROM CATALOG C1
58  WHERE C1.PID = C.PID );
59
60  /* FOR EACH PART, FIND THE SNAME OF THE SUPPLIER WHO CHARGES THE MOST FOR THAT PART.*/
61  • SELECT P.PID, S.SNAME
62  FROM PARTS P, SUPPLIERS S, CATALOG C
63  WHERE C.PID = P.PID
64  AND C.SID = S.SID
65  AND C.COST = (SELECT MAX(C1.COST)
66  FROM CATALOG C1
67  WHERE C1.PID = P.PID);
68
69  /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70  • SELECT DISTINCT C.SID
71  FROM CATALOG C
72  WHERE NOT EXISTS ( SELECT *
73  FROM PARTS P
74  WHERE P.PID = C.PID AND P.COLOR <> 'RED' );
```



27°C



ENG



MySQL Workbench

dbms server

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lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5*

Limit to 200 rows

```

65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 SELECT DISTINCT C.SID
71 FROM CATALOG C

```

Result Grid

	SID	SNAME	CITY
▶	10001	ACME WIDGET	BANGALORE
	10002	JOHNS	KOLKATA
	10003	VIMAL	MUMBAI
	10004	RELIANCE	DELHI
•	NULL	NULL	NULL

SUPPLIERS 1 PARTS 2 CATALOG 3 Result 4 SUPPLIERS 5 SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
✓ 103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

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MySQL Workbench

dbms server

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lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5*

Limit to 200 rows

```
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 SELECT DISTINCT C.SID
71 FROM CATALOG C
```

Result Grid

	PID	PNAME	COLOR
▶	20001	BOOK	RED
	20002	PEN	RED
	20003	PENCIL	GREEN
	20004	MOBILE	GREEN
	20005	CHARGER	BLACK
*	NULL	NULL	NULL

SUPPLIERS 1 PARTS 2 CATALOG 3 Result 4 SUPPLIERS 5 SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
✓ 103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

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MySQL Workbench

dbms server x

File Edit View Query Database Server Tools Scripting Help

lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5* x

Limit to 200 rows

```
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 • SELECT DISTINCT C.SID
71 FROM CATALOG C
```

Result Grid

	SID	PID	COST
▶	10001	20001	10
	10001	20002	10
	10001	20003	30
	10001	20004	10
	10001	20005	10
	10002	20001	10
	10002	20002	20
	10002	20003	30

SUPPLIERS 1 PARTS 2 CATALOG 3 x Result 4 SUPPLIERS 5 SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10 Apply

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
✓ 103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

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MySQL Workbench

dbms server

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lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5*

Limit to 200 rows

```
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 • SELECT DISTINCT C.SID
71 FROM CATALOG C
```

Result Grid

	PNAME
▶	BOOK
	PEN
	PENCIL
	MOBILE
	CHARGER

SUPPLIERS 1 PARTS 2 CATALOG 3 Result 4 x SUPPLIERS 5 SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
✓ 103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

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MySQL Workbench

dbms server x

File Edit View Query Database Server Tools Scripting Help

lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5* x

Limit to 200 rows

```
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 • SELECT DISTINCT C.SID
71 FROM CATALOG C
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

SNAME
ACME WIDGET

SUPPLIERS 1 PARTS 2 CATALOG 3 Result 4 SUPPLIERS 5 x SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
✓ 103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

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```

65  AND C.COST = (SELECT MAX(C1.COST)
66  FROM CATALOG C1
67  WHERE C1.PID = P.PID);
68
69  /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70  •  SELECT DISTINCT C.SID
71  FROM CATALOG C

```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	SNAME
▶	ACME WIDGET
	JOHNS

SUPPLIERS 1	PARTS 2	CATALOG 3	Result 4	SUPPLIERS 5	SUPPLIERS 6 ×	Result 7	CATALOG 8	Result 9	CATALOG 10
-------------	---------	-----------	----------	-------------	---------------	----------	-----------	----------	------------


 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

71 FROM CATALOG C

Wrap Cell Content: 

CHARGER

CATALOG 10

Read Only

Output

Action Output

105 19:44:57 SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH... 2 row(s) returned 0.000 sec / 0.000 sec

```

65  AND C.COST = (SELECT MAX(C1.COST)
66  FROM CATALOG C1
67  WHERE C1.PID = P.PID);
68
69  /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70  •  SELECT DISTINCT C.SID
71  FROM CATALOG C

```

Result Grid Filter Rows: Export: Wrap Cell Content:

	SID
►	10002
	10004

Output

Action Output

#	Time	Action	Message	Duration / Fetch
102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

dbms server

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lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5*

Limit to 200 rows

```
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 SELECT DISTINCT C.SID
71 FROM CATALOG C
```

Result Grid

PID	SNAME
20001	ACME WIDGET
20001	JOHNS
20002	JOHNS
20003	RELIANCE
20004	ACME WIDGET
20005	ACME WIDGET

SUPPLIERS 1 PARTS 2 CATALOG 3 Result 4 SUPPLIERS 5 SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10

Output

Action Output

#	Time	Action	Message	Duration / Fetch
102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
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105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

19:45 06-07-2021

MySQL Workbench

dbms server x

File Edit View Query Database Server Tools Scripting Help

lab 6 dbms lab 7 dbms lab 8 dbms SQL File 5* x

Limit to 200 rows

```
65 AND C.COST = (SELECT MAX(C1.COST)
66 FROM CATALOG C1
67 WHERE C1.PID = P.PID);
68
69 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/
70 • SELECT DISTINCT C.SID
71 FROM CATALOG C
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	SID
▶	10001
	10002

SUPPLIERS 1 PARTS 2 CATALOG 3 Result 4 SUPPLIERS 5 SUPPLIERS 6 Result 7 CATALOG 8 Result 9 CATALOG 10 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 102	19:44:57	SELECT P.PNAME FROM PARTS P, CATALOG C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID ...	2 row(s) returned	0.016 sec / 0.000 sec
✓ 103	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE C.COST > (SELECT AVG (C1.COST) FROM CA...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 104	19:44:57	SELECT P.PID, S.SNAME FROM PARTS P, SUPPLIERS S, CATALOG C WHERE C.PID = P.PID AND ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 105	19:44:57	SELECT DISTINCT C.SID FROM CATALOG C WHERE NOT EXISTS (SELECT * FROM PARTS P WH...	2 row(s) returned	0.000 sec / 0.000 sec

Type here to search

19:45 06-07-2021