

# DBMS LAB

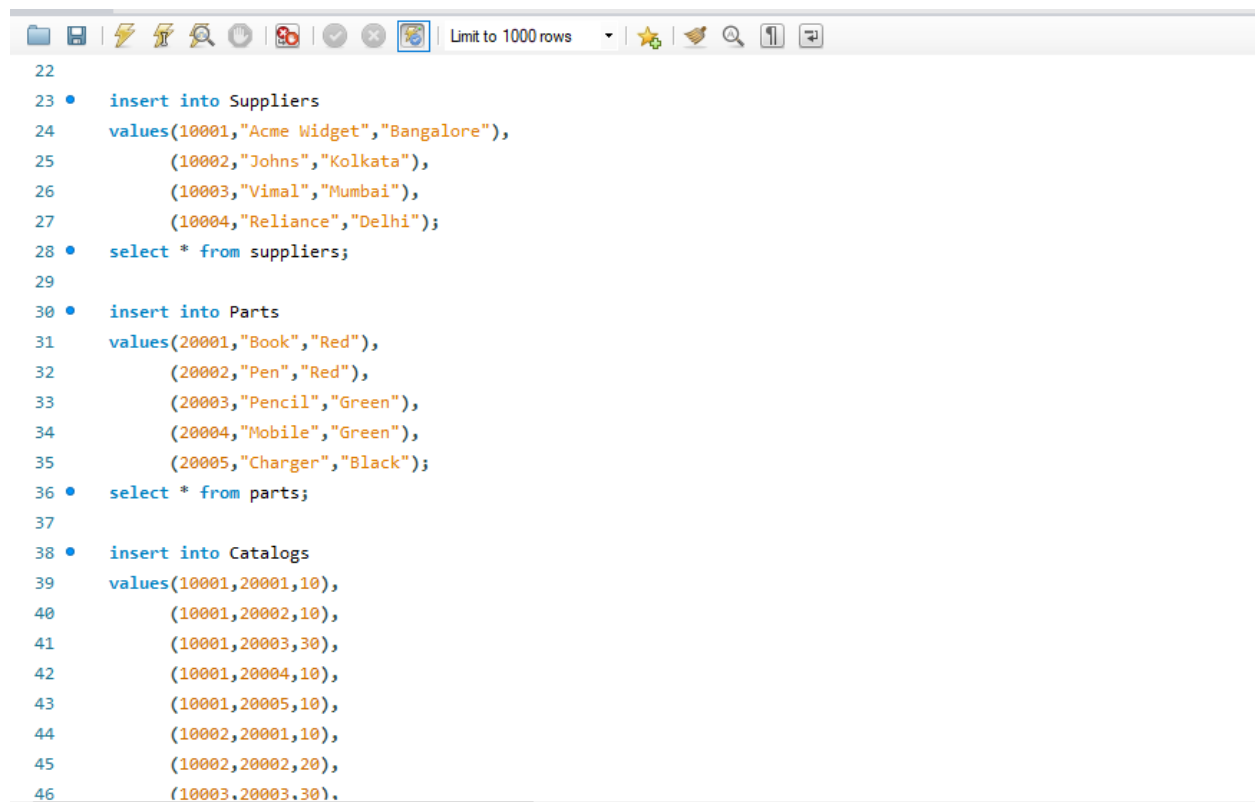
Mallika Prasad

1BM19CS081

LAB PROG 8

OUTPUT

## Value Insertion



```
22
23 • insert into Suppliers
24 values(10001,"Acme Widget","Bangalore"),
25        (10002,"Johns","Kolkata"),
26        (10003,"Vimal","Mumbai"),
27        (10004,"Reliance","Delhi");
28 • select * from suppliers;
29
30 • insert into Parts
31 values(20001,"Book","Red"),
32        (20002,"Pen","Red"),
33        (20003,"Pencil","Green"),
34        (20004,"Mobile","Green"),
35        (20005,"Charger","Black");
36 • select * from parts;
37
38 • insert into Catalogs
39 values(10001,20001,10),
40        (10001,20002,10),
41        (10001,20003,30),
42        (10001,20004,10),
43        (10001,20005,10),
44        (10002,20001,10),
45        (10002,20002,20),
46        (10003,20003,30),
```

**SELECT DISTINCT P.PNAME FROM PARTS P, CATALOGS C WHERE P.PID = C.PID;**

The screenshot shows a SQL IDE interface. The query editor contains the following SQL code:

```
46      (10003,20003,30),
47      (10004,20003,40);
48 • select * from catalogs;
49 /* 1 - FIND THE PNAMEs OF PARTS FOR WHICH THERE IS SOME SUPPLIER. */
50 • SELECT DISTINCT P.PNAME
51   FROM PARTS P, CATALOGS C
52  WHERE P.PID = C.PID;
53
54 /* FIND THE SNAMEs OF SUPPLIERS WHO SUPPLY EVERY PART */
```

The results pane shows a table with the following data:

PNAME
Book
Pen
Pencil
Mobile
Charger

**SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM PARTS P WHERE NOT EXISTS (SELECT C.SID FROM CATALOGS C WHERE C.SID = S.SID AND C.PID = P.PID));**

The screenshot shows a SQL IDE interface. The query editor contains the following SQL code:

```
52  WHERE P.PID = C.PID;
53
54 /* FIND THE SNAMEs OF SUPPLIERS WHO SUPPLY EVERY PART */
55 • SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM
56   PARTS P WHERE NOT EXISTS (SELECT C.SID FROM CATALOGS C WHERE C.SID =
57   S.SID AND C.PID = P.PID));
58
59 /* FIND THE SNAMEs OF SUPPLIERS WHO SUPPLY EVERY RED PART. */
60 • SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM
```

The results pane shows a table with the following data:

SNAME
Acme Widget

**SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM PARTS P WHERE P.COLOR = 'RED' AND (NOT EXISTS (SELECT C.SID FROM CATALOGS C WHERE C.SID = S.SID AND C.PID = P.PID))));**

The screenshot shows a database query editor with a toolbar at the top. The query is as follows:

```

58
59  /* FIND THE SNAME OF SUPPLIERS WHO SUPPLY EVERY RED PART. */
60  • SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM
61  PARTS P WHERE P.COLOR = 'RED' AND (NOT EXISTS (SELECT C.SID FROM
62  CATALOGS C WHERE C.SID = S.SID AND C.PID = P.PID)));
63
64  /* FIND THE PNAME OF PARTS SUPPLIED BY ACME WIDGET SUPPLIERS AND BY NO ONE ELSE */
65  • SELECT P.PNAME FROM PARTS P, CATALOGS C, SUPPLIERS S WHERE P.PID
66  = C.PID AND C.SID = S.SID AND S.SNAME = 'ACME WIDGET' AND NOT EXISTS

```

Below the query, the 'Result Grid' is displayed with the following data:

SNAME
Acme Widget
Johns

The interface also includes a 'Filter Rows' field, an 'Export' button, and a 'Wrap Cell Content' checkbox.

**SELECT P.PNAME FROM PARTS P, CATALOGS C, SUPPLIERS S WHERE P.PID = C.PID AND C.SID = S.SID AND S.SNAME = 'ACME WIDGET' AND NOT EXISTS (SELECT \* FROM CATALOGS C1, SUPPLIERS S1 WHERE P.PID = C1.PID AND C1.SID = S1.SID AND S1.SNAME <> 'ACME WIDGET');**

The screenshot shows a database query editor with a toolbar at the top. The query is as follows:

```

64  /* FIND THE PNAME OF PARTS SUPPLIED BY ACME WIDGET SUPPLIERS AND BY NO ONE ELSE */
65  • SELECT P.PNAME FROM PARTS P, CATALOGS C, SUPPLIERS S WHERE P.PID
66  = C.PID AND C.SID = S.SID AND S.SNAME = 'ACME WIDGET' AND NOT EXISTS
67  (SELECT * FROM CATALOGS C1, SUPPLIERS S1 WHERE P.PID = C1.PID AND
68  C1.SID = S1.SID AND S1.SNAME <> 'ACME WIDGET');
69
70  /* FIND THE SIDS OF SUPPLIERS WHO CHARGE MORE FOR SOME PART THAN THE AVERAGE COST OF THAT PART (AVERAGED OVER
71  ALL THE SUPPLIERS WHO SUPPLY THAT PART).
72  */

```

Below the query, the 'Result Grid' is displayed with the following data:

PNAME
Mobile
Charger

The interface also includes a 'Filter Rows' field, an 'Export' button, and a 'Wrap Cell Content' checkbox.

**SELECT DISTINCT C.SID FROM CATALOG C**

**WHERE C.COST > ( SELECT AVG (C1.COST)**

**FROM CATALOGS C1**

**WHERE C1.PID = C.PID );**

```

70  /* FIND THE SIDS OF SUPPLIERS WHO CHARGE MORE FOR SOME PART THAN THE AVERAGE COST OF THAT PART (AVERAGED OVER
71  ALL THE SUPPLIERS WHO SUPPLY THAT PART).
72  */
73  • SELECT DISTINCT C.SID FROM CATALOGS C
74  WHERE C.COST > ( SELECT AVG (C1.COST)
75  FROM CATALOGS C1
76  WHERE C1.PID = C.PID );
77
78  /* FOR EACH PART, FIND THE SNAME OF THE SUPPLIER WHO CHARGES THE MOST FOR THAT PART.*/

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
SID			
10002			
10004			

**SELECT P.PID, S.SNAME**

**FROM PARTS P, SUPPLIERS S, CATALOG C**

**WHERE C.PID = P.PID**

**AND C.SID = S.SID**

**AND C.COST = (SELECT MAX(C1.COST)**

**FROM CATALOGS C1**

**WHERE C1.PID = P.PID);**

```

79  • SELECT P.PID, S.SNAME
80  FROM PARTS P, SUPPLIERS S, CATALOGS C
81  WHERE C.PID = P.PID
82  AND C.SID = S.SID
83  AND C.COST = (SELECT MAX(C1.COST)
84  FROM CATALOGS C1
85  WHERE C1.PID = P.PID);
86
87  /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
PID	SNAME		
20001	Acme Widget		
20004	Acme Widget		
20005	Acme Widget		
20001	Johns		
20002	Johns		
20003	Reliance		

**SELECT DISTINCT C.SID**

**FROM CATALOGS C**

**WHERE NOT EXISTS ( SELECT \***

**FROM PARTS P**

**WHERE P.PID = C.PID AND P.COLOR <> 'RED' );**

The screenshot shows a database query editor with a toolbar at the top. The query is as follows:

```
85 WHERE C1.PID = P.PID);  
86  
87 /* FIND THE SIDS OF SUPPLIERS WHO SUPPLY ONLY RED PARTS.*/  
88 • SELECT DISTINCT C.SID  
89 FROM CATALOGS C  
90 WHERE NOT EXISTS ( SELECT *  
91 FROM PARTS P  
92 WHERE P.PID = C.PID AND P.COLOR <> 'RED' );
```

Below the query editor, there is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The results are displayed in a table:

SID
10001
10002

On the right side of the interface, there are buttons for "Result Grid" and "Form".