

# **Database and Management System Lab**

**Lab Experiment – 5**

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1.

```
mysql> CREATE TABLE SUPPLIER (  
->     SCODE VARCHAR(6) PRIMARY KEY,  
->     SNAME VARCHAR(20) NOT NULL,  
->     CITY VARCHAR(20),  
->     TURNOVER DECIMAL(10,2)  
-> );  
Query OK, 0 rows affected (0.02 sec)  
  
mysql> CREATE TABLE PART (  
->     PCODE VARCHAR(6) PRIMARY KEY,  
->     WEIGH DECIMAL(5,2),  
->     COLOR VARCHAR(20),  
->     COST DECIMAL(10,2),  
->     SELLINGPRICE DECIMAL(10,2)  
-> );  
Query OK, 0 rows affected (0.01 sec)  
  
mysql> CREATE TABLE SUPPLIER_PART (  
->     SCODE VARCHAR(6),  
->     PCODE VARCHAR(6),  
->     QTY INT,  
->     PRIMARY KEY (SCODE, PCODE),  
->     FOREIGN KEY (SCODE) REFERENCES SUPPLIER(SCODE),  
->     FOREIGN KEY (PCODE) REFERENCES PART(PCODE)  
-> );  
Query OK, 0 rows affected (0.03 sec)
```

2.

```
mysql> INSERT INTO SUPPLIER (SCODE, SNAME, CITY, TURNOVER)
-> VALUES
->      ('S001', 'Supplier1', 'Bombay', 50),
->      ('S002', 'Supplier2', 'Delhi', 75),
->      ('S003', 'Supplier3', 'Bombay', NULL),
->      ('S004', 'Supplier4', 'Chennai', 90),
->      ('S005', 'Supplier5', 'Bombay', 50);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> INSERT INTO PART (PCODE, WEIGH, COLOR, COST, SELLINGPRICE)
-> VALUES
->      ('P001', 30, 'Red', 20, 35),
->      ('P002', 28, 'Blue', 40, 55),
->      ('P003', 32, 'Green', 25, 45),
->      ('P004', 36, 'Yellow', 30, 50),
->      ('P005', 22, 'Black', 40, 60);
Query OK, 5 rows affected (0.00 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> INSERT INTO SUPPLIER_PART (SCODE, PCODE, QTY)
-> VALUES
->      ('S001', 'P001', 100),
->      ('S001', 'P002', 150),
->      ('S002', 'P003', 200),
->      ('S003', 'P001', 250),
->      ('S004', 'P004', 300),
->      ('S005', 'P002', 120);
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

3. 1.

```
mysql> SELECT SCODE, PCODE FROM SUPPLIER_PART ORDER BY SCODE ASC;
+-----+-----+
| SCODE | PCODE |
+-----+-----+
| S001  | P001  |
| S001  | P002  |
| S002  | P003  |
| S003  | P001  |
| S004  | P004  |
| S005  | P002  |
+-----+-----+
6 rows in set (0.00 sec)
```

2.

```
mysql> SELECT * FROM SUPPLIER WHERE CITY = 'Bombay' AND TURNOVER = 50;
+-----+-----+-----+-----+
| SCODE | SNAME      | CITY   | TURNOVER |
+-----+-----+-----+-----+
| S001  | Supplier1  | Bombay | 50.00    |
| S005  | Supplier5  | Bombay | 50.00    |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

3.

```
mysql> SELECT COUNT(*) AS TotalSuppliers FROM SUPPLIER;
+-----+
| TotalSuppliers |
+-----+
| 5              |
+-----+
1 row in set (0.00 sec)
```

4.

```
mysql> SELECT PCODE FROM PART WHERE WEIGH BETWEEN 25 AND 35;
+-----+
| PCODE |
+-----+
| P001  |
| P002  |
| P003  |
+-----+
3 rows in set (0.00 sec)
```

5.

```
mysql> SELECT SCODE FROM SUPPLIER WHERE TURNOVER IS NULL;
+-----+
| SCODE |
+-----+
| S003  |
+-----+
1 row in set (0.00 sec)
```

6.

```
mysql>
mysql> SELECT PCODE FROM PART WHERE COST IN (20, 30, 40);
+-----+
| PCODE |
+-----+
| P001  |
| P002  |
| P004  |
| P005  |
+-----+
4 rows in set (0.00 sec)
```

7.

```
mysql> SELECT SUM(QTY) AS TotalQuantity FROM SUPPLIER_PART WHERE PCODE = 'P002';
+-----+
| TotalQuantity |
+-----+
|          270  |
+-----+
1 row in set (0.00 sec)
```

8.

```
mysql> SELECT SNAME FROM SUPPLIER WHERE SCODE IN (SELECT SCODE FROM SUPPLIER_PART WHERE PCODE = 'P002');
+-----+
| SNAME |
+-----+
| Supplier1 |
| Supplier5 |
+-----+
2 rows in set (0.00 sec)
```

9.

```
mysql> SELECT PCODE FROM PART WHERE COST > (SELECT AVG(COST) FROM PART);
+-----+
| PCODE |
+-----+
| P002  |
| P005  |
+-----+
2 rows in set (0.00 sec)
```

## 10.

```
mysql>
mysql> SELECT SCODE, TURNOVER FROM SUPPLIER ORDER BY TURNOVER DESC;
```

| SCODE | TURNOVER |
|-------|----------|
| S004  | 90.00    |
| S002  | 75.00    |
| S001  | 50.00    |
| S005  | 50.00    |
| S003  | NULL     |

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