EXPERIMENT 5 DBMS LAB

CODE:

```
-- Create the Supplier table
CREATE TABLE Supplier (
    scode INT PRIMARY KEY,
    sname VARCHAR(100),
    scity VARCHAR(100),
    turnover DECIMAL(10, 2)
);

-- Create the Part table
CREATE TABLE Part (
    pcode INT PRIMARY KEY,
    weight DECIMAL(10, 2),
    color VARCHAR(50),
    cost DECIMAL(10, 2),
    sellingprice DECIMAL(10, 2)
);

-- Create the Supplier_Part table
CREATE TABLE Supplier_Part (
    scode INT,
    pcode INT,
    qty INT,
    FOREIGN KEY (scode) REFERENCES Supplier(scode),
    FOREIGN KEY (pcode) REFERENCES Part(pcode)
);

-- Populate the tables with sample data
INSERT INTO Supplier (scode, sname, scity, turnover)
VALUES (1, 'Supplier A', 'Bombay', 50),
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    (2, 'Supplier B', 'Delhi', 70),
    (3, 'Supplier C', 'Bombay', NULL);

INSERT INTO Part (pcode, weight, color, cost, sellingprice)
VALUES (1, 20, 'Red', 20, 25),
    (2, 30, 'Blue', 30, 35),
    (3, 25, 'Green', 40, 50);

INSERT INTO Supplier_Part (scode, pcode, qty)
VALUES (1, 1, 100),
    (1, 2, 150),
    (2, 2, 200),
    (3, 3, 50);

-- Queries

-- 1. Get the supplier number and part number in ascending order of supplier number
SELECT scode, pcode
FROM Supplier_Part
ORDER BY scode ASC;

-- 2. Get the details of supplier who operate from Bombay with turnover 50
SELECT *
FROM Supplier
WHERE scity = 'Bombay' AND turnover = 50;

-- 3. Get the total number of suppliers
SELECT COUNT(*) AS total_suppliers
FROM Supplier;

-- 4. Get the part number weighing between 25 and 35
```

```
SELECT pcode
FROM Part
WHERE weight BETWEEN 25 AND 35;

-- 5. Get the supplier number whose turnover is null
SELECT scode
FROM Supplier
WHERE turnover IS NULL;

-- 6. Get the part number that cost 20, 30, or 40 rupees
SELECT pcode
FROM Part
WHERE cost IN (20, 30, 40);

-- 7. Get the total quantity of part 2 that is supplied
SELECT SUM(qty) AS total_quantity
FROM Supplier_Part
WHERE pcode = 2;

-- 8. Get the name of supplier who supply part 2
SELECT sname
FROM Supplier
WHERE scode IN (
   SELECT scode
   FROM Supplier_Part
   WHERE pcode = 2
);

-- 9. Get the part number whose cost is greater than the average cost
SELECT pcode
FROM Part
```

WHERE cost > (SELECT AVG(cost) FROM Part);

-- 10. Get the supplier number and turnover in descending order of turnover

SELECT scode, turnover

FROM Supplier

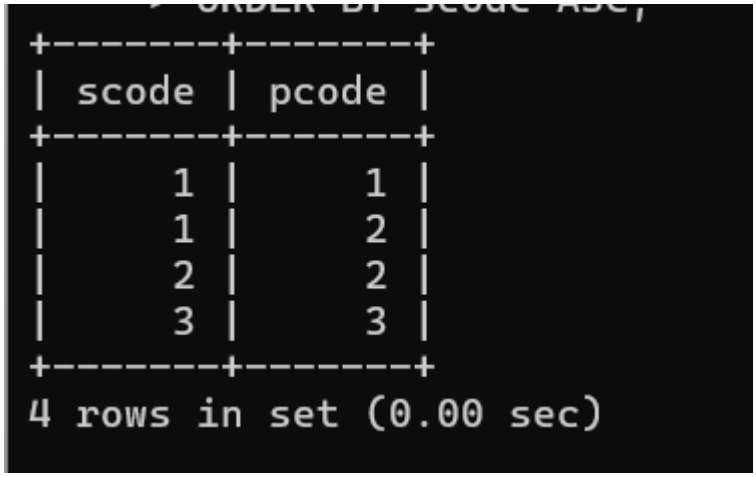
ORDER BY turnover DESC;

SELECT * FROM supplier;

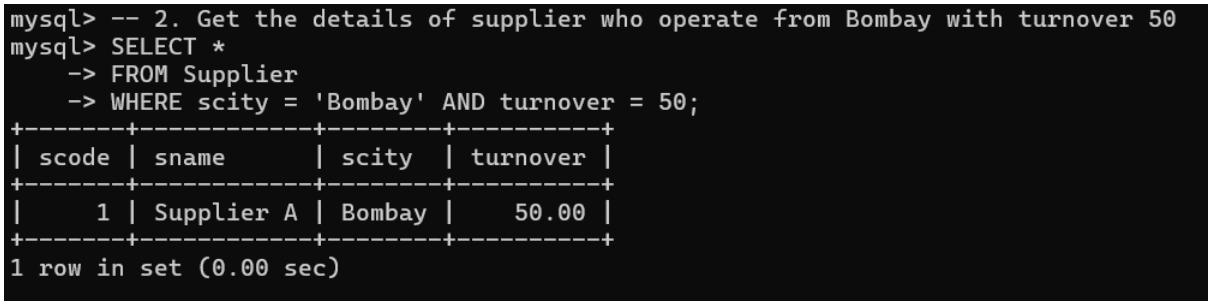
SELECT * FROM Supplier_Part;

SELECT * FROM Part;

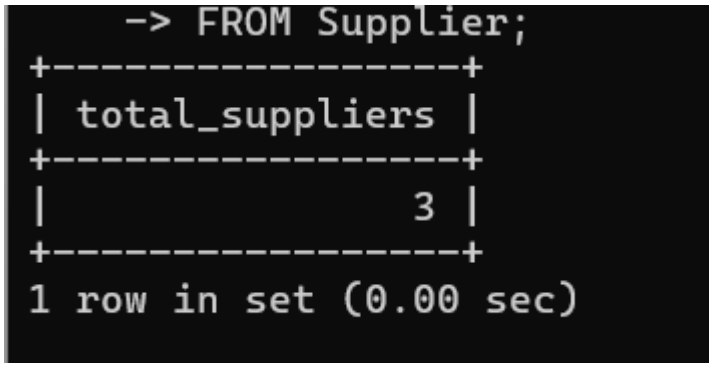
OUTPUT:



```
+-------+-------+
| scode | pcode |
+-------+-------+
|     1 |     1 |
|     1 |     2 |
|     2 |     2 |
|     3 |     3 |
+-------+-------+
4 rows in set (0.00 sec)
```



```
mysql> -- 2. Get the details of supplier who operate from Bombay with turnover 50
mysql> SELECT *
    -> FROM Supplier
    -> WHERE scity = 'Bombay' AND turnover = 50;
+-------+-----------+--------+----------+
| scode | sname     | scity  | turnover |
+-------+-----------+--------+----------+
|     1 | Supplier A | Bombay |    50.00 |
+-------+-----------+--------+----------+
1 row in set (0.00 sec)
```



```
    -> FROM Supplier;
+-----------------+
| total_suppliers |
+-----------------+
|               3 |
+-----------------+
1 row in set (0.00 sec)
```

```
+-------+
| pcode |
+-------+
|     2 |
|     3 |
+-------+
2 rows in set (0.00 sec)
```

```
+-------+
| scode |
+-------+
|     3 |
+-------+
1 row in set (0.00 sec)
```

```
+-------+
| pcode |
+-------+
|     1 |
|     2 |
|     3 |
+-------+
3 rows in set (0.00 sec)
```

```
    -> WHERE pcode = 2;
+----------------+
| total_quantity |
+----------------+
|            350 |
+----------------+
1 row in set (0.00 sec)
```

```
+------------+
| sname      |
+------------+
| Supplier A |
| Supplier B |
+------------+
2 rows in set (0.00 sec)
```

```
    -> WHERE cost > (SELEC
+-------+
| pcode |
+-------+
|     3 |
+-------+
1 row in set (0.00 sec)
```

```
    -> ORDER BY turnover DESC;
+-------+----------+
| scode | turnover |
+-------+----------+
|     2 |    70.00 |
|     1 |    50.00 |
|     3 |     NULL |
+-------+----------+
3 rows in set (0.00 sec)

mysql>
mysql> SELECT * FROM supplier;
+-------+------------+--------+----------+
| scode | sname      | scity  | turnover |
+-------+------------+--------+----------+
|     1 | Supplier A | Bombay |    50.00 |
|     2 | Supplier B | Delhi  |    70.00 |
|     3 | Supplier C | Bombay |     NULL |
+-------+------------+--------+----------+
3 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Supplier_Part;
+-------+-------+------+
| scode | pcode | qty  |
+-------+-------+------+
|     1 |     1 |  100 |
|     1 |     2 |  150 |
|     2 |     2 |  200 |
|     3 |     3 |   50 |
+-------+-------+------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Part;
+-------+--------+-------+-------+--------------+
| pcode | weight | color | cost  | sellingprice |
+-------+--------+-------+-------+--------------+
|     1 |  20.00 | Red   | 20.00 |        25.00 |
|     2 |  30.00 | Blue  | 30.00 |        35.00 |
|     3 |  25.00 | Green | 40.00 |        50.00 |
+-------+--------+-------+-------+--------------+
3 rows in set (0.00 sec)
```