SQL Exercise 5
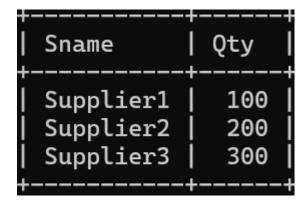
1. Display the Supplier name and the Quantity sold.

Ans: select Supplier.Sname , `supplier-parts-project`.Qty
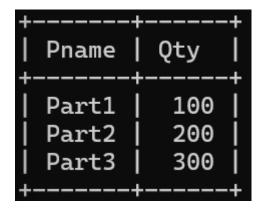
   -> from Supplier,`supplier-parts-project`

   -> where supplier.`S#`= `supplier-parts-project`.`S#`;

```
+-----------------+-----------+
| Sname           | Qty       |
+-----------------+-----------+
| Supplier1       | 100       |
| Supplier2       | 200       |
| Supplier3       | 300       |
+-----------------+-----------+
```

2. Display the Part name and Quantity sold.

Ans: select Parts.Pname , `supplier-parts-project`.Qty

   -> from Parts,`supplier-parts-project`

   -> where Parts.`P#`=`supplier-parts-project`.`P#`;

```
+--------+--------+
| Pname  | Qty    |
+--------+--------+
| Part1  | 100    |
| Part2  | 200    |
| Part3  | 300    |
+--------+--------+
```

3. Display the Project name and Quantity sold.

Ans: select Projects.Jname,`supplier-parts-project`.Qty

   -> from Projects,`supplier-parts-project`

   -> where Projects.`J#`=`supplier-parts-project`.`J#`;

```
+-----------+--------+
| Jname     | Qty    |
+-----------+--------+
| Project1  |  100   |
| Project2  |  200   |
| Project3  |  300   |
+-----------+--------+
```

4. Display the Supplier name, Part name, Project name and Quantity sold.

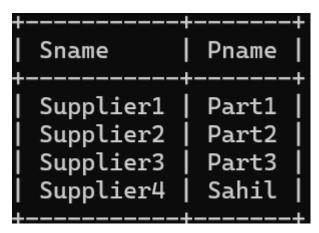**Ans:** select Supplier.Sname ,Parts.Pname , Projects.Jname,`supplier-parts-project`.Qty

    -> from Supplier,Parts, Projects,`supplier-parts-project`

    -> where supplier.`S#`= `supplier-parts-project`.`S#`and

    -> Parts.`P#`=`supplier-parts-project`.`P#`

    -> and Projects.`J#`=`supplier-parts-project`.`J#`;

```
+-----------+--------+-----------+--------+
| Sname     | Pname  | Jname     | Qty    |
+-----------+--------+-----------+--------+
| Supplier1 | Part1  | Project1  |  100   |
| Supplier2 | Part2  | Project2  |  200   |
| Supplier3 | Part3  | Project3  |  300   |
+-----------+--------+-----------+--------+
```

5. Display the Supplier name, Supplying Parts to a Project in the same City.

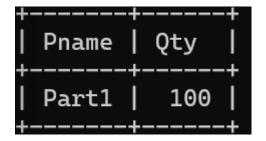**Ans**: select supplier.Sname , Parts.Pname from supplier,Parts

    -> where supplier.City=Parts.City;

```
+-----------+--------+
| Sname     | Pname  |
+-----------+--------+
| Supplier1 | Part1  |
| Supplier2 | Part2  |
| Supplier3 | Part3  |
| Supplier4 | Sahil  |
+-----------+--------+
```

6. Display the Part name that is 'Red' is color, and the Quantity sold.

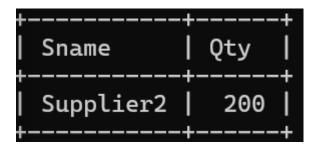**Ans:** select Parts.Pname,`supplier-parts-project`.Qty from Parts,`supplier-parts-project`

   -> where Parts.`P#`=`supplier-parts-project`.`P#`

   -> and Parts.Color='Red';

```
+-------+-------+
| Pname | Qty   |
+-------+-------+
| Part1 |  100  |
+-------+-------+
```

7. Display all the Quantity sold by Suppliers with the Status = 20.
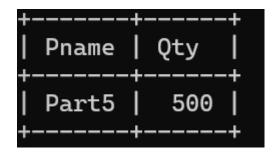
Ans: select Supplier.Sname, `supplier-parts-project`.Qty

   -> from Supplier,`supplier-parts-project`

   -> where Supplier.`S#`=`supplier-parts-project`.`S#`

   -> and Supplier.Status = 20;

```
+-----------+-------+
| Sname     | Qty   |
+-----------+-------+
| Supplier2 |  200  |
+-----------+-------+
```

8. Display all the Parts and Quantity with a Weight > 14.

Ans: SELECT parts.Pname, `supplier-parts-project`.Qty

   -> FROM parts

   -> JOIN `supplier-parts-project`

   -> ON parts.`P#` = `supplier-parts-project`.`P#`

   -> WHERE parts.Weight > 14;

```
+--------+--------+
| Pname  | Qty    |
+--------+--------+
| Part5  |  500   |
+--------+--------+
```

9. Display all the Project names and City, which has bought more than 500 Parts.
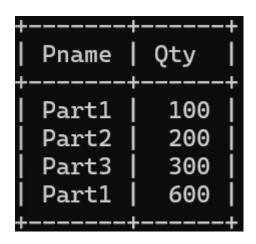
Ans: SELECT projects.Jname, projects.City

    -> FROM projects

    -> JOIN `supplier-parts-project`

    -> ON projects.`J#` = `supplier-parts-project`.`J#`

    -> GROUP BY projects.Jname, projects.City

    -> HAVING SUM(`supplier-parts-project`.Qty) > 500;

```
+----------+--------+
| Jname    | City   |
+----------+--------+
| Project2 | Athens |
+----------+--------+
```

10. Display all the Part names and Quantity sold that have a Weight less than 15.

Ans: SELECT parts.Pname, `supplier-parts-project`.Qty

    -> FROM parts

    -> JOIN `supplier-parts-project`

    -> ON parts.`P#` = `supplier-parts-project`.`P#`

    -> WHERE parts.Weight < 15;

```
+--------+--------+
| Pname  | Qty    |
+--------+--------+
| Part1  |   100  |
| Part2  |   200  |
| Part3  |   300  |
| Part1  |   600  |
+--------+--------+
```

11. Display all the Employee names and the name of their Managers.

Ans: CREATE TABLE employees (

   -> EmpID INT PRIMARY KEY,

   -> EmpName VARCHAR(50),

   -> ManagerID INT

   ->);

INSERT INTO employees (EmpID, EmpName, ManagerID) VALUES

   -> (1, 'Alice', 3),

   -> (2, 'Bob', 3),

   -> (3, 'Charlie', NULL);

```
+--------+----------+-----------+
| EmpID  | EmpName  | ManagerID |
+--------+----------+-----------+
|     1  | Alice    |        3  |
|     2  | Bob      |        3  |
|     3  | Charlie  |     NULL  |
+--------+----------+-----------+
```