

SQL Exercise 5

1. Display the Supplier name and the Quantity sold.

Ans: -

```
mysql> SELECT s.SNAME AS Supplier_Name, SUM(CAST(spj.QTY AS UNSIGNED)) AS Quantity_Sold
-> FROM s
-> JOIN spj ON s.`S#` = spj.`S#`
-> GROUP BY s.SNAME;
```

Supplier_Name	Quantity_Sold
Clark	2150
Miller	1050
Davis	1300
NULL	2700

4 rows in set (0.01 sec)

2. Display the Part name and Quantity sold.

Ans: -

```
mysql> SELECT p.PNAME AS Part_Name, SUM(CAST(spj.QTY AS UNSIGNED)) AS Quantity_Sold
-> FROM p
-> JOIN spj ON p.`P#` = spj.`P#`
-> GROUP BY p.PNAME;
```

Part_Name	Quantity_Sold
Spring	150
Washer	250
Stud	300
NULL	6980
Shaft	220

5 rows in set (0.00 sec)

3. Display the Project name and Quantity sold.

Ans: -

```
mysql> SELECT j.JNAME AS Project_Name, SUM(CAST(spj.QTY AS UNSIGNED)) AS Quantity_Sold
-> FROM j
-> JOIN spj ON j.`J#` = spj.`J#`
-> GROUP BY j.JNAME;
```

Project_Name	Quantity_Sold
Hermes	1150
NULL	6400
Athena	1100
Hercules	400

4 rows in set (0.00 sec)

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

Ans: -

```
mysql> SELECT s.SNAME AS Supplier_Name, p.PNAME AS Part_Name,
j.JNAME AS Project_Name,
-> SUM(CAST(spj.QTY AS UNSIGNED)) AS Quantity_Sold
-> FROM s
-> JOIN spj ON s.`S#` = spj.`S#`
-> JOIN p ON p.`P#` = spj.`P#`
-> JOIN j ON j.`J#` = spj.`J#`
-> GROUP BY s.SNAME, p.PNAME, j.JNAME;
```

Supplier_Name	Part_Name	Project_Name	Quantity_Sold
NULL	NULL	Hercules	180
NULL	NULL	NULL	2300
NULL	Shaft	Hercules	220
NULL	NULL	Hermes	300
Clark	Spring	Hermes	150
Clark	Spring	NULL	150
Clark	NULL	NULL	2000
Miller	Washer	NULL	250
Miller	NULL	Athena	800
Davis	Stud	Athena	300
Davis	NULL	NULL	1000

11 rows in set (0.00 sec)

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

Ans: -

```
mysql> SELECT s.SNAME AS Supplier_Name
-> FROM s
-> JOIN spj ON s.`S#` = spj.`S#`
```

```

-> JOIN p ON p.`P#` = spj.`P#`
-> JOIN j ON j.`J#` = spj.`J#`
-> WHERE s.CITY = j.CITY
-> GROUP BY s.SNAME;
+-----+
| Supplier_Name |
+-----+
| Clark         |
| Davis         |
+-----+
2 rows in set (0.00 sec)

```

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

Ans: -

```

mysql> SELECT p.PNAME AS Part_Name, SUM(CAST(spj.QTY AS UNSIGNED))
AS Quantity_Sold
-> FROM p
-> JOIN spj ON p.`P#` = spj.`P#`
-> WHERE p.COLOR = 'Red'
-> GROUP BY p.PNAME;

```

```

+-----+-----+
| Part_Name | Quantity_Sold |
+-----+-----+
| Washer    | 250           |
+-----+-----+
1 row in set (0.00 sec)

```

7. Display all the Quantity sold by Suppliers with the Status = 20.

Ans: -

```

mysql> SELECT s.SNAME AS Supplier_Name, SUM(CAST(spj.QTY AS
UNSIGNED)) AS Quantity_Sold
-> FROM s
-> JOIN spj ON s.`S#` = spj.`S#`
-> WHERE s.STATUS = 20
-> GROUP BY s.SNAME;

```

```

+-----+-----+
| Supplier_Name | Quantity_Sold |
+-----+-----+
| Smith         | 1180          |
| Blake         | 670           |
+-----+-----+
2 rows in set (0.00 sec)

```

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

Ans: -

```
mysql> SELECT p.PNAME AS Part_Name, SUM(CAST(spj.QTY AS UNSIGNED))
AS Quantity_Sold
-> FROM p
-> JOIN spj ON p.`P#` = spj.`P#`
-> WHERE CAST(p.WEIGHT AS UNSIGNED) > 14
-> GROUP BY p.PNAME;
```

```
+-----+-----+
| Part_Name | Quantity_Sold |
+-----+-----+
| Stud      | 300           |
+-----+-----+
```

1 row in set, 4 warnings (0.00 sec)

9. Display all the Project names and City, which has bought more than 500 Parts.

Ans: -

```
mysql> SELECT j.JNAME AS Project_Name, j.CITY AS Project_City,
-> SUM(CAST(spj.QTY AS UNSIGNED)) AS Total_Quantity
-> FROM j
-> JOIN spj ON j.`J#` = spj.`J#`
-> GROUP BY j.JNAME, j.CITY
-> HAVING Total_Quantity > 500;
```

```
+-----+-----+-----+
| Project_Name | Project_City | Total_Quantity |
+-----+-----+-----+
| Hermes       | Berlin       | 1300           |
| NULL         | NULL         | 7450           |
| Athena       | Rome         | 1100           |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

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

Ans: -

```
mysql> SELECT p.PNAME AS Part_Name, SUM(CAST(spj.QTY AS UNSIGNED))
AS Quantity_Sold
-> FROM p
-> JOIN spj ON p.`P#` = spj.`P#`
-> WHERE CAST(p.WEIGHT AS UNSIGNED) < 15
-> GROUP BY p.PNAME;
```

```
+-----+-----+
| Part_Name | Quantity_Sold |
+-----+-----+
```

Spring	150
Washer	250
Shaft	220

3 rows in set, 4 warnings (0.00 sec)

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

```
mysql> SELECT e.EMPNAME AS Employee_Name, m.EMPNAME AS Manager_Name
-> FROM semp e
-> LEFT JOIN semp m ON e.DEPTHEAD = m.EMPNO;
```

Employee_Name	Manager_Name
SUNIL	NULL
HIREN	NULL
ALI	NULL
GEORGE	NULL

4 rows in set (0.02 sec)