

SQL Exercise 5

```
mysql> select * from `supplier-parts-project`;
```

```
+-----+-----+-----+-----+  
| S# | P# | J# | Qty |  
+-----+-----+-----+-----+  
| S1 | P1 | J1 | 100 |  
| S2 | P2 | J2 | 150 |  
| S3 | P3 | J3 | 200 |  
+-----+-----+-----+-----+
```

3 rows in set (0.01 sec)

```
mysql> select * from supplier;
```

```
+-----+-----+-----+-----+  
| S# | sname | status | city |  
+-----+-----+-----+-----+  
| S1 | Smith | 20 | London |  
| S2 | Jones | 10 | Paris |  
| S3 | Blake | 30 | Athens |  
| S4 | Clark | 20 | London |  
| S5 | Adams | 25 | Paris |  
| S6 | Alamo | 24 | Paris |  
+-----+-----+-----+-----+
```

6 rows in set (0.01 sec)

```
mysql> select * from parts;
```

```
+-----+-----+-----+-----+  
| P# | Pname | Color | Weight | city |  
+-----+-----+-----+-----+  
| P1 | Nut | Red | 12 | London |  
| P2 | Bolt | Green | 17 | Paris |  
| P3 | Screw | Blue | 14 | Athens |  
| P4 | Washer | Red | 12 | London |  
| P5 | Nail | Yellow | 10 | Athens |  
+-----+-----+-----+-----+
```

5 rows in set (0.01 sec)

1. Display the Supplier name and the Quantity sold.

```
mysql> select supplier.sname as supplierName, `supplier-parts-project`.Qty as  
Quantity
```

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

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

```
+-----+-----+  
| supplierName | Quantity |  
+-----+-----+  
| Smith      |    100 |  
| Jones      |    150 |  
| Blake      |    200 |  
+-----+-----+
```

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

```
mysql> select supplier.sname as supplierName, `supplier-parts-project`.Qty as  
Quantity
```

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

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

```
-> order by supplier.sname;
```

```
+-----+-----+  
| supplierName | Quantity |  
+-----+-----+  
| Blake      |    200 |  
| Jones      |    150 |  
| Smith      |    100 |  
+-----+-----+
```

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

2. Display the Part name and Quantity sold.

```
mysql> select parts.pname as partsName, `supplier-parts-project`.Qty as  
Quantity
```

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

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

```
-> order by parts.pname;
```

```
+-----+-----+  
| partsName | Quantity |  
+-----+-----+  
| Bolt      |    150 |  
| Nut       |    100 |  
| Screw     |    200 |  
+-----+-----+
```

3 rows in set (0.00 sec)

3. Display the Project name and Quantity sold.

```
mysql> select projects.Jname as projectName, `supplier-parts-project`.Qty as  
Quantity
```

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

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

```
-> order by projects.Jname;
```

```
+-----+-----+  
| projectName | Quantity |  
+-----+-----+  
| Project1    | 100      |  
| Project2    | 150      |  
| Project3    | 200      |  
+-----+-----+
```

3 rows in set (0.00 sec)

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

```
mysql> select supplier.sname as supplierName, parts.pname as partsName,  
projects.Jname as project  
Name, `supplier-parts-project`.Qty as Quantity
```

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

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

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

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

```
-> order by supplier.sname;
```

```
+-----+-----+-----+-----+  
| supplierName | partsName | projectName | Quantity |  
+-----+-----+-----+-----+  
| Blake       | Screw    | Project3    | 200      |  
| Jones       | Bolt     | Project2    | 150      |  
| Smith       | Nut      | Project1    | 100      |  
+-----+-----+-----+-----+
```

3 rows in set (0.01 sec)

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

```
mysql> select supplier.sname as supplierName, parts.pname as partsName,
'supplier-parts-project'.J# as ProjectName, supplier.city as supplierCity,
parts.city as partCity
-> from supplier, parts, 'supplier-parts-project'
-> where 'supplier-parts-project'.S# = supplier.S#
-> and 'supplier-parts-project'.P# = parts.P#
-> and supplier.city = parts.city;
+-----+-----+-----+-----+
| supplierName | partsName | ProjectName | supplierCity | partCity |
+-----+-----+-----+-----+
| Smith      | Nut      | J1         | London      | London   |
| Jones      | Bolt     | J2         | Paris       | Paris    |
| Blake      | Screw    | J3         | Athens      | Athens   |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

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

```
mysql> select parts.pname as partsName, 'supplier-parts-project'.Qty as Quantity
-> from parts, 'supplier-parts-project'
-> where 'supplier-parts-project'.P# = parts.P#
-> and parts.color = 'Red';
+-----+-----+
| partsName | Quantity |
+-----+-----+
| Nut      | 100      |
+-----+-----+
1 row in set (0.00 sec)
```

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

```
mysql> select supplier.sname as supplierName, supplier.status as status, 'supplier-
parts-
project'.Qty as Quantity
-> from supplier, 'supplier-parts-project'
-> where 'supplier-parts-project'.S# = supplier.S#
-> and supplier.status = 20;
+-----+-----+-----+
| supplierName | status | Quantity |
+-----+-----+-----+
| Smith      | 20    | 100      |
+-----+-----+-----+
1 row in set (0.01 sec)
```

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

```
mysql> select parts.pname as PartName, parts.weight as Weigth, `supplier-
parts-project`.Q
ty as Quantity
-> from parts, `supplier-parts-project`
-> where `supplier-parts-project`.`P#` = parts.`P#`
-> and parts.weight > 14
-> order by parts.pname;
+-----+-----+-----+
| PartName | Weigth | Quantity |
+-----+-----+-----+
| Bolt    | 17    | 150      |
+-----+-----+-----+
1 row in set (0.01 sec)
```

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

```
mysql> select projects.Jname as ProjectName, projects.city as City,
sum(`supplier-parts-project`
.Qty) as Quantity
-> from projects, `supplier-parts-project`
-> where `supplier-parts-project`.`J#` = projects.`J#`
-> group by projects.Jname, projects.city
-> having sum(`supplier-parts-project`.Qty) > 500;
+-----+-----+-----+
| ProjectName | City | Quantity |
+-----+-----+-----+
| Project3    | Paris | 510      |
+-----+-----+-----+
1 row in set (0.01 sec)
```

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

```
mysql> select * from `supplier-parts-project`;
```

```
+-----+-----+-----+-----+
| S#  | P#  | J#  | Qty  |
+-----+-----+-----+-----+
| S1  | P1  | J1  | 300  |
| S2  | P2  | J2  | 250  |
| S3  | P3  | J3  | 510  |
+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> select parts.pname as PartName, parts.weight as Weight,
sum(`supplier-parts-project`.Qty) as Quantity
```

```
-> from parts, `supplier-parts-project`
-> where `supplier-parts-project`.`P#` = parts.`P#`
-> group by parts.pname, parts.weight
-> having parts.weight < 15;
```

```
+-----+-----+-----+
| PartName | Weight | Quantity |
+-----+-----+-----+
| Nut      | 12     | 300      |
| Screw    | 14     | 510      |
+-----+-----+-----+
```

2 rows in set (0.00 sec)

```
mysql> select parts.pname as PartName, parts.weight as Weight, `supplier-
parts-project`.Qty as Quantity
```

```
-> from parts, `supplier-parts-project`
-> where `supplier-parts-project`.`P#` = parts.`P#`
-> and parts.weight < 15
-> order by parts.pname;
```

```
+-----+-----+-----+
| PartName | Weight | Quantity |
+-----+-----+-----+
| Nut      | 12     | 300      |
| Screw    | 14     | 510      |
+-----+-----+-----+
```

2 rows in set (0.00 sec)

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

```
mysql> select * from employees;
```

```

+-----+-----+-----+
| empid | empname  | managerid |
+-----+-----+-----+
| 1 | John Smith | NULL |
| 2 | Jane Doe   | 1 |
| 3 | Mark Brown | 1 |
| 4 | Emily Davis | 2 |
| 5 | Michael Lee | 2 |
| 6 | Sarah Clark | 3 |
+-----+-----+-----+
6 rows in set (0.00 sec)

```

```

mysql> select e.empname as EmployeeName,
        -> m.empname as ManagerName
        -> from employees e
        -> left join employees m on e.managerid = m.empid;

```

```

+-----+-----+
| EmployeeName | ManagerName |
+-----+-----+
| John Smith   | NULL       |
| Jane Doe     | John Smith |
| Mark Brown   | John Smith |
| Emily Davis  | Jane Doe   |
| Michael Lee  | Jane Doe   |
| Sarah Clark  | Mark Brown |
+-----+-----+
6 rows in set (0.00 sec)

```