Exercise 04

1. **Display the minimum Status in the Supplier table:**

```
SELECT MIN(Status) AS MinimumStatus
FROM Supplier;
```

2. **Display the maximum Weight in the Parts table:**

```
SELECT MAX(Weight) AS MaximumWeight
FROM Parts;
```

3. **Display the average Weight of the Parts:**

```
SELECT AVG(Weight) AS AverageWeight
FROM Parts;
```

4. **Display the total Quantity sold for part 'P1':**

```
SELECT SUM(Quantity) AS TotalQuantitySold
FROM Sales
WHERE PartID = 'P1';
```

5. **Display the total Quantity sold for each part:**

```
SELECT PartID, SUM(Quantity) AS TotalQuantitySold
FROM Sales
GROUP BY PartID;
```

6. **Display the average Quantity sold for each part:**

```
SELECT PartID, AVG(Quantity) AS AverageQuantitySold
FROM Sales
GROUP BY PartID;
```

7. **Display the maximum Quantity sold for each part, provided the maximum Quantity is greater than 800:**

```
SELECT PartID, MAX(Quantity) AS MaximumQuantitySold
FROM Sales
GROUP BY PartID
HAVING MAX(Quantity) > 800;
```

8. **Display the Status and the count of Suppliers with that Status:**

```
SELECT Status, COUNT(*) AS SupplierCount
FROM Supplier
GROUP BY Status;
```

9. **Display the count of Projects going on in different cities:**

```
SELECT City, COUNT(*) AS ProjectCount
FROM Projects
GROUP BY City;
```

10. **What is the difference between COUNT(Status) and COUNT(*)?**
    - `COUNT(Status)` counts only the non-NULL values in the Status column, while `COUNT(*)` counts all rows in the table, including those with NULL values.

11. **Display the Status and the Count of Suppliers with that Status in the specified format:**

```
SELECT CASE Status
            WHEN 10 THEN 'Ten'
            WHEN 20 THEN 'Twenty'
            WHEN 30 THEN 'Thirty'
            ELSE 'Unknown'
        END AS Status,
        COUNT(*) AS Count
FROM Supplier
GROUP BY Status;
```