

You can use **UNION ALL** or **UNION DISTINCT** to combine three or more query results into a single result set. To do this, simply add another **UNION** operator after the final **SELECT** statement and add another **SELECT** statement after it. For example, the following query uses three **SELECT** statements, combined with two **UNION ALL** operators:

```
SELECT color, 'red' AS component, red AS value
```

```
FROM crayons
```

```
WHERE color = 'Mauvelous'
```

#### **UNION ALL**

```
SELECT color, 'green' AS component, green AS value
```

```
FROM crayons
```

```
WHERE color = 'Mauvelous'
```

#### **UNION ALL**

```
SELECT color, 'blue' AS component, blue AS value
```

```
FROM crayons
```

```
WHERE color = 'Mauvelous';
```

This query returns the three component values (**red, green, blue**) of the color named **Mauvelous**, in three separate rows.

Be sure to use a semicolon only at the very end.

When using three or more **UNION** operators in one query, it's a good idea to make them all **UNION ALL** or all **UNION DISTINCT**. Mixing the two different types of **UNION** operators in a single query is likely to cause confusion.

The rules that apply when using a **UNION** to combine two results also apply in the case of three or more results:

- The **SELECT** statements should have the same number of columns and the sets of corresponding columns should have the same names and the same high-level categories of data types. Use explicit casting and column aliases to ensure this.
- You can use the **SELECT, FROM, WHERE, GROUP BY**, and **HAVING** clauses in each **SELECT** statement, but be careful about using the **ORDER BY** and **LIMIT** clauses. Check the documentation for the specific SQL engine you're using, and run some simple tests to make sure you understand how it will interpret the **ORDER BY** and **LIMIT** clauses in **UNION** queries.

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