✓ **Congratulations! You passed!**

Grade received 100%   **To pass** 80% or higher

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Weekly challenge 1

Latest Submission Grade 100%

1. Which phase of the data analysis process has the goal of identifying trends and relationships?

   ◉ Analyze

   ○ Act

   ○ Process

   ○ Prepare

   ✓ **Correct**
   The goal of analysis is to identify trends and relationships within that data so you can accurately answer the question you're asking.

1 / 1 point

2. During which of the four phases of analysis do you gather the relevant datasets for a project?

   ○ Get input from others

   ◉ Organize data

   ○ Format and adjust data

   ○ Transform data

   ✓ **Correct**
   Gathering the relevant datasets for a project occurs while organizing data.

1 / 1 point

3. Which of the following actions might occur when transforming data? Select all that apply.

   ☑ Recognize relationships in your data

   ✓ **Correct**
   Transforming data means identifying relationships and patterns between the data, and making calculations based on the data you have.

1 / 1 point

☐ Eliminate irrelevant info from your data

☑ Make calculations based on your data

> ✓ **Correct**
> Transforming data means identifying relationships and patterns between the data, and making calculations based on the data you have.

☑ Identify a pattern in your data

> ✓ **Correct**
> Transforming data means identifying relationships and patterns between the data, and making calculations based on the data you have.

4. Typically, a data analyst uses filters when they want to expand the amount of data they are working with.

1 / 1 point

○ True

● False

> ✓ **Correct**
> Typically, a data analyst uses filters when they want to narrow down the amount of data they are working with.

5. A data analyst is sorting data in a spreadsheet. Which tool are they using if all of the data is sorted by the ranking of a specific sorted column and data across rows is kept together?

1 / 1 point

○ Sort Document

● Sort Sheet

○ Sort Together

○ Sort Rank

> ✓ **Correct**
> Sort sheet sorts all of the data in a spreadsheet by the ranking of a specific sorted column. Also, data across rows is kept together.

6. A data analyst uses a function to sort a spreadsheet range between cells H1 and K65. They sort in ascending order by the first column, Column H. What is the syntax they are using?

1 / 1 point

○ =SORT(H1:K65, A, FALSE)
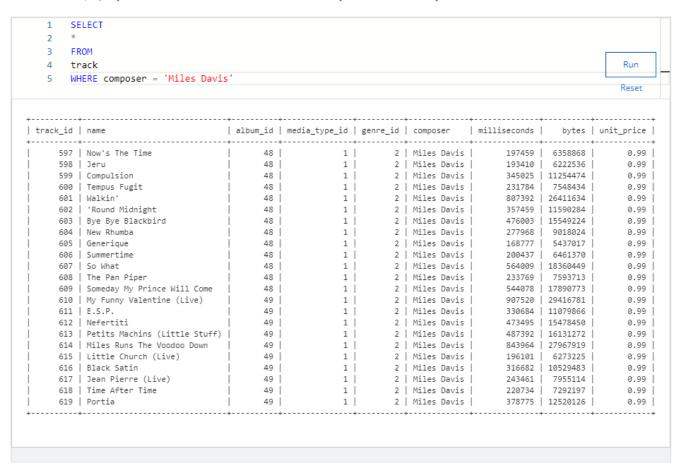
● =SORT(H1:K65, 1, TRUE)

○ =SORT(H1:K65, 1, FALSE)

○ =SORT(H1:K65, A, TRUE)

✓ **Correct**
The syntax is =SORT(H1:K65, 1, TRUE). The first part of the function sorts the data in the specified range. The 1 represents the first column. And a TRUE statement sorts in ascending order.

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7. You are querying a database that contains data about music. You are only interested in data related to the jazz musician Miles Davis. The names of the musicians are listed in the *composer* column.

You write the SQL query below. Add a WHERE clause that will return only data about music by Miles Davis.

```
1    SELECT
2    *
3    FROM
4    track                                                              Run
5    WHERE composer = 'Miles Davis'
                                                                        Reset
```

```
+----------+------------------------------+----------+--------------+----------+--------------+--------------+----------+------------+
| track_id | name                         | album_id | media_type_id| genre_id | composer     | milliseconds |   bytes  | unit_price |
+----------+------------------------------+----------+--------------+----------+--------------+--------------+----------+------------+
|   597    | Now's The Time               |    48    |      1       |    2     | Miles Davis  |   197459     | 6358868  |   0.99     |
|   598    | Jeru                         |    48    |      1       |    2     | Miles Davis  |   193410     | 6222536  |   0.99     |
|   599    | Compulsion                   |    48    |      1       |    2     | Miles Davis  |   345025     | 11254474 |   0.99     |
|   600    | Tempus Fugit                 |    48    |      1       |    2     | Miles Davis  |   231784     | 7548434  |   0.99     |
|   601    | Walkin'                      |    48    |      1       |    2     | Miles Davis  |   807392     | 26411634 |   0.99     |
|   602    | 'Round Midnight              |    48    |      1       |    2     | Miles Davis  |   357459     | 11590284 |   0.99     |
|   603    | Bye Bye Blackbird            |    48    |      1       |    2     | Miles Davis  |   476003     | 15549224 |   0.99     |
|   604    | New Rhumba                   |    48    |      1       |    2     | Miles Davis  |   277968     | 9018024  |   0.99     |
|   605    | Generique                    |    48    |      1       |    2     | Miles Davis  |   168777     | 5437017  |   0.99     |
|   606    | Summertime                   |    48    |      1       |    2     | Miles Davis  |   200437     | 6461370  |   0.99     |
|   607    | So What                      |    48    |      1       |    2     | Miles Davis  |   564009     | 18360449 |   0.99     |
|   608    | The Pan Piper                |    48    |      1       |    2     | Miles Davis  |   233769     | 7593713  |   0.99     |
|   609    | Someday My Prince Will Come  |    48    |      1       |    2     | Miles Davis  |   544078     | 17890773 |   0.99     |
|   610    | My Funny Valentine (Live)    |    49    |      1       |    2     | Miles Davis  |   907520     | 29416781 |   0.99     |
|   611    | E.S.P.                       |    49    |      1       |    2     | Miles Davis  |   330684     | 11079866 |   0.99     |
|   612    | Nefertiti                    |    49    |      1       |    2     | Miles Davis  |   473495     | 15478450 |   0.99     |
|   613    | Petits Machins (Little Stuff)|    49    |      1       |    2     | Miles Davis  |   487392     | 16131272 |   0.99     |
|   614    | Miles Runs The Voodoo Down   |    49    |      1       |    2     | Miles Davis  |   843964     | 27967919 |   0.99     |
|   615    | Little Church (Live)         |    49    |      1       |    2     | Miles Davis  |   196101     | 6273225  |   0.99     |
|   616    | Black Satin                  |    49    |      1       |    2     | Miles Davis  |   316682     | 10529483 |   0.99     |
|   617    | Jean Pierre (Live)           |    49    |      1       |    2     | Miles Davis  |   243461     | 7955114  |   0.99     |
|   618    | Time After Time              |    49    |      1       |    2     | Miles Davis  |   220734     | 7292197  |   0.99     |
|   619    | Portia                       |    49    |      1       |    2     | Miles Davis  |   378775     | 12520126 |   0.99     |
+----------+------------------------------+----------+--------------+----------+--------------+--------------+----------+------------+
```

What track by Miles Davis appears in row 1 of your query result?

○ Compulsion

○ So What

○ Summertime

◉ Now's The Time

✓ **Correct**
The clause `WHERE composer = "Miles Davis"` will return only data about music by Miles Davis. The complete query is
`SELECT * FROM track WHERE composer = "Miles Davis"`. The WHERE clause filters results that meet certain conditions. The WHERE clause includes the name of the column, an equals sign, and the value(s) in the column to include.

8. You are working with a database that contains invoice data about online music purchases. You are only interested in invoices sent to customers located in the city of Paris. You want to sort the invoices by order total in ascending order. The order totals are listed in the *total* column.

You write the SQL query below. Add an ORDER BY clause that will sort the invoices by order total in ascending order.

```
1    SELECT
2    *
3    FROM
4    invoice
5    WHERE
6    billing_city = "Paris" and invoice_id = 203
7    ORDER BY
8        total
9    ASC
10
```

Run

Reset

```
--------+------------+--------------+----------------+--------------+---------------+-----------------+--------------------+-------+
voice_id | customer_id | invoice_date |  billing_address | billing_city | billing_state | billing_country | billing_postal_code | total |
--------+------------+--------------+----------------+--------------+---------------+-----------------+--------------------+-------+
  203 |        40 | 2011-06-19 00:00:00 | 8, Rue Hanovre | Paris |      | None | France |  75002 | 2.98 |
--------+------------+--------------+----------------+--------------+---------------+-----------------+--------------------+-------+
```

What total appears in row 6 of your query result?

- ⦿ 2.98
- ◯ 0.99
- ◯ 8.91
- ◯ 3.96

✓ **Correct**
The clause `ORDER BY total` will sort the invoices order total in ascending order. The complete query is `SELECT * FROM invoice WHERE billing_city = "Paris" ORDER BY total`. The ORDER BY clause tells the database how to organize the data it returns. The ORDER BY clause sorts data in ascending order by default.

The total 2.98 appears in row 6 of your query result.