

# Instructions: SQL Challenge

**Challenge 1**  
Write a SQL query that lists all Playlists.

**Query**

```
select * from artist
```

**Results**

| ArtistId | Name                 |
|----------|----------------------|
| 1        | AC/DC                |
| 2        | Accept               |
| 3        | Aerosmith            |
| 4        | Alanis Morissette    |
| 5        | Alice in Chains      |
| 6        | Antônio Carlos Jobim |
| 7        | Apocalyptica         |
| R        | Articulate           |

**Tests**

- Passed** The output includes a 'Name' column. Check
- Failed** The output includes all playlists. Check
- Failed** The query contains the word 'playlists'. Check

The diagram illustrates a database schema with the following tables and their relationships:

- Artist**: Contains columns ArtistId (PK), Name, and Bio.
- Album**: Contains columns AlbumId (PK), Title, and ArtistId (FK).
- Track**: Contains columns TrackId (PK), Name, MediaTypeId (FK), and Composer.
- Media Type**: Contains columns MediaTypeId (PK) and Name.
- Employee**: Contains columns EmployeeId (PK), LastName, FirstName, Title, ReportTo, BirthDate, HireDate, Address, City, State, Country, PostCode, Phone, Fax, Email, and SupportRepId.
- Customer**: Contains columns CustomerId (PK), FirstName, LastName, Company, Address, City, State, Country, PostalCode, Phone, Fax, Email, and SupportRepId.
- Invoice**: Contains columns InvoiceId (PK), CustomerId, InvoiceDate, BillingAddress, BillingCity, BillingState, BillingCountry, and Total.
- Invoice Line**: Contains columns InvoiceLineId (PK), InvoiceId (FK), TrackId, and UnitPrice.
- Playlist**: Contains columns PlaylistId (PK) and Name.
- Playlist Track**: Contains columns PlaylistId (FK) and TrackId (FK).
- Genre**: Contains columns GenreId (PK) and Name.

Relationships are indicated by foreign key constraints (FK) such as FK\_Artist\_Album, FK\_Album\_Track, FK\_Track\_MediaType, FK\_Employee\_Reportsto, FK\_Employee\_Customer, FK\_Customer\_Invoice, and FK\_Playlist\_PlaylistTrack.

|                                       |   |             |  |                     |   |
|---------------------------------------|---|-------------|--|---------------------|---|
| <b>Resource name</b>                  | SQL Challenge   |             |  |                     |   |
| <b>Description</b>                    | This resource allows you to create a challenge whose resolution requires participants to enter an SQL query.  |             |  |                     |   |
| <b>Usage requirements</b>             | Database in sqlite format.  |             |  |                     |   |
| <b>Configuration options</b>          |   |             |  |                     |   |
| <b>Issue</b>                          | This option allows you to select the challenge's appearance using one of Bootswatch's themes: <a href="https://bootswatch.com/">https://bootswatch.com/</a>   |             |  |                     |   |
| <b>Action after resolving</b>         | This option allows you to select the action that will be performed after solving the challenge. It can take the following values: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;"><b>None</b></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><b>Show message</b></td> <td style="padding: 5px;">Selecting this action will display a message to participants when they enter the correct sequence.<br/>The message can be customized using the "Message" option.</td> </tr> </table> | <b>None</b> |  | <b>Show message</b> | Selecting this action will display a message to participants when they enter the correct sequence.<br>The message can be customized using the "Message" option. |
| <b>None</b>                           |   |             |  |                     |   |
| <b>Show message</b>                   | Selecting this action will display a message to participants when they enter the correct sequence.<br>The message can be customized using the "Message" option.   |             |  |                     |   |
| <b>Background</b>                     | This option allows you to change the default background. You can enter the URL of any image you have in your resource catalog.  |             |  |                     |   |
| <b>Database URL</b>                   | This option allows you to specify the URL of the database to be used in the challenge. It can be an external URL or from the resource catalog.  |             |  |                     |   |
| <b>Qualification</b>                  | This option allows you to specify the puzzle title.   |             |  |                     |   |
| <b>Ask</b>                            | This option allows you to specify the question to be answered or the challenge instructions, which will be displayed at the top after the title.  |             |  |                     |   |
| <b>Initial consultation</b>           | This option allows you to specify a default query that will be displayed initially  |             |  |                     |   |
| <b>Title of the consultation area</b> | This option allows you to specify the title of the query area.  |             |  |                     |   |
| <b>Placeholder for the query area</b> | This option allows you to specify the help content for the query area.  |             |  |                     |   |
| <b>Title of the results area</b>      | This option allows you to specify the title of the results area.  |             |  |                     |   |

|   |   |
|---|---|
| <b>Placeholder for the results area</b> | This option allows you to specify the initial content to be displayed in the results area before performing any query.  |
| <b>Title of the testing area</b>        | This option allows you to specify the title of the test area.   |
| <b>Testing area placeholder</b>         | This option allows you to specify the initial content to be displayed in the test area before performing any query.   |
| <b>Tests</b>                            | <p>This option allows you to specify each test to be performed. Each test requires a title and a JavaScript command that returns <b>true</b> (if the test passes) or <b>false</b> (if it fails). The available variables are <code>columns</code>, <code>rows</code>, and <code>query</code>, which allow you to check both query properties and results.</p> <p><b>Examples:</b></p> <ol style="list-style-type: none"> <li>Check if a column called 'Name' is returned<br/> <code>columns.includes('Name')</code></li> <li>Check if one of the entries for the 'Name' column contains the term 'audiobooks'<br/> <code>const idx = columns.indexOf('Name'); if (idx === -1) return false; return rows.some(r =&gt; String(r[idx]).toLowerCase().includes('audiobooks'));</code></li> <li>Check if the query contains the word 'Playlist'<br/> <code>/\\bPlaylist\\b/i.test(query)</code></li> </ol> |
| <b>Title of the information area</b>    | This option allows you to specify the title of the information area in the right panel.   |
| <b>Image</b>                            | This option allows you to specify the image to display in the right panel.  |