

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

Relationships are indicated by foreign key (FK) constraints:

- FK\_Artist\_Album: ArtistId (Artist) to AlbumId (Album)
- FK\_Album\_Track: AlbumId (Album) to TrackId (Track)
- FK\_MediaType\_Track: MediaTypeId (MediaType) to TrackId (Track)
- FK\_Genre\_Track: GenreId (Genre) to TrackId (Track)
- FK\_Employee\_ReportsTo: ReportsTo (Employee) to EmployeeId (Employee)
- FK\_Employee\_Customer: EmployeeId (Employee) to CustomerId (Customer)
- FK\_Customer\_Invoice: CustomerId (Customer) to InvoiceId (Invoice)
- FK\_Track\_InvoiceLine: TrackId (Track) to InvoiceLineId (Invoice Line)
- FK\_Playlist\_PlaylistTrack: PlaylistId (Playlist) to TrackId (Track)

<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. 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. 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. 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  <code>columns.includes('Name')</code></li> <li>Check if one of the entries for the 'Name' column contains the term 'audiobooks'  <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'  <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.
<b>Solution</b>	The solution is a semicolon-separated list of 1s and 0s corresponding to each defined test. The number 1 represents a test evaluated as <b>true</b> , and the number 0 represents a test evaluated as <b>false</b> . Therefore, if completing the challenge requires passing three tests, for example, the solution should be "1;1;1".