Data Modeling & Power BI

- Chinook Database

  (On Azure or Local)

  - MySQL
  - SQL Server
  - PostgreSQL

- Tools
  - SQL
  - Microsoft Power BI

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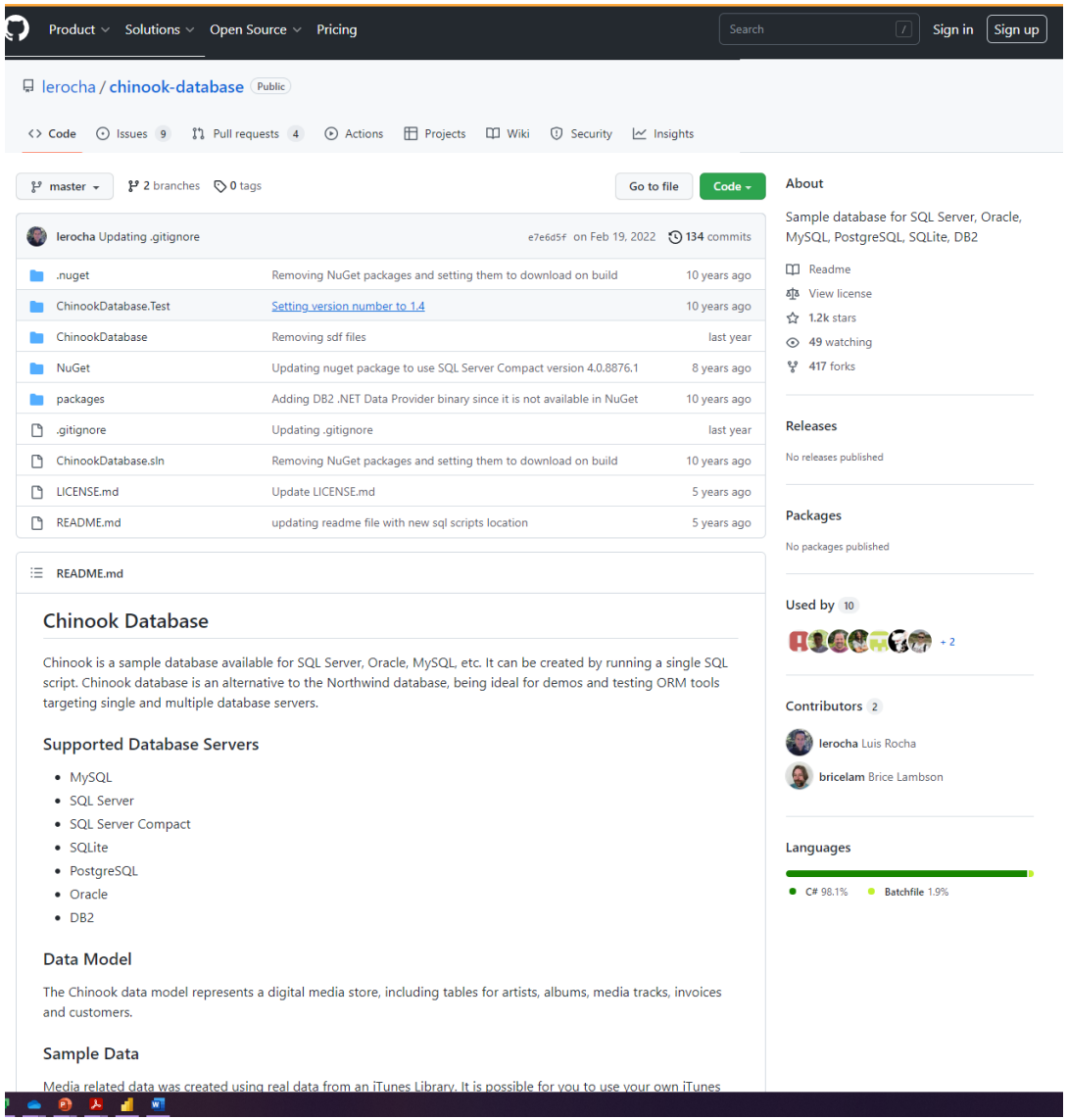
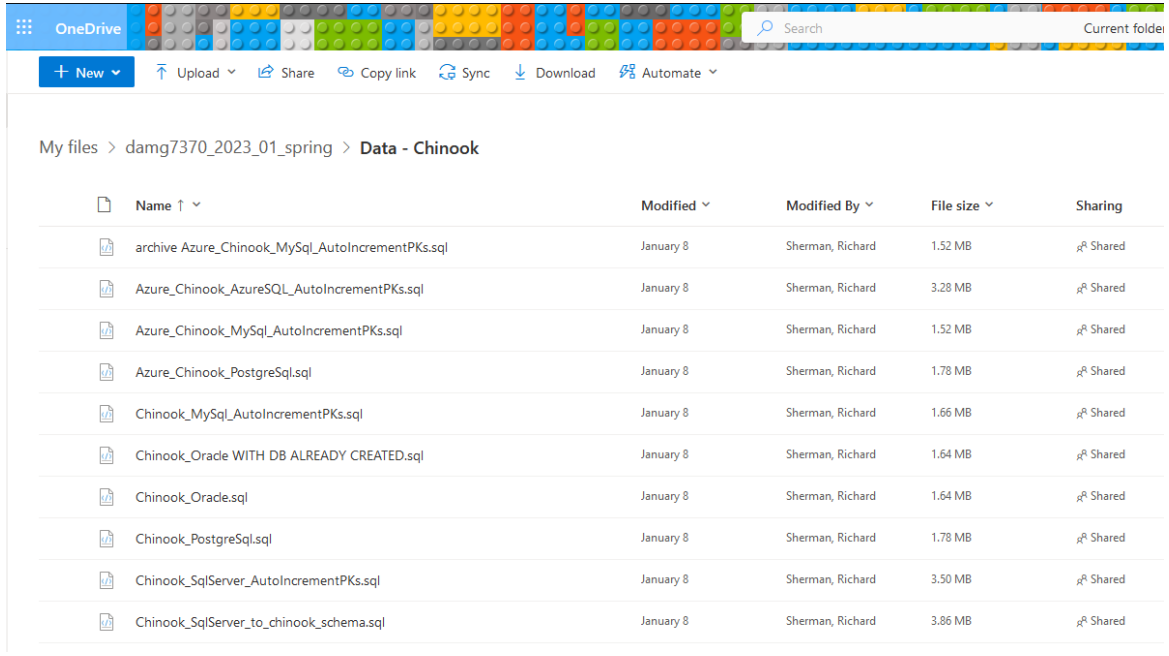
Chinook Database Github

View Link for NU students:
[damg7370_2023_01_spring]





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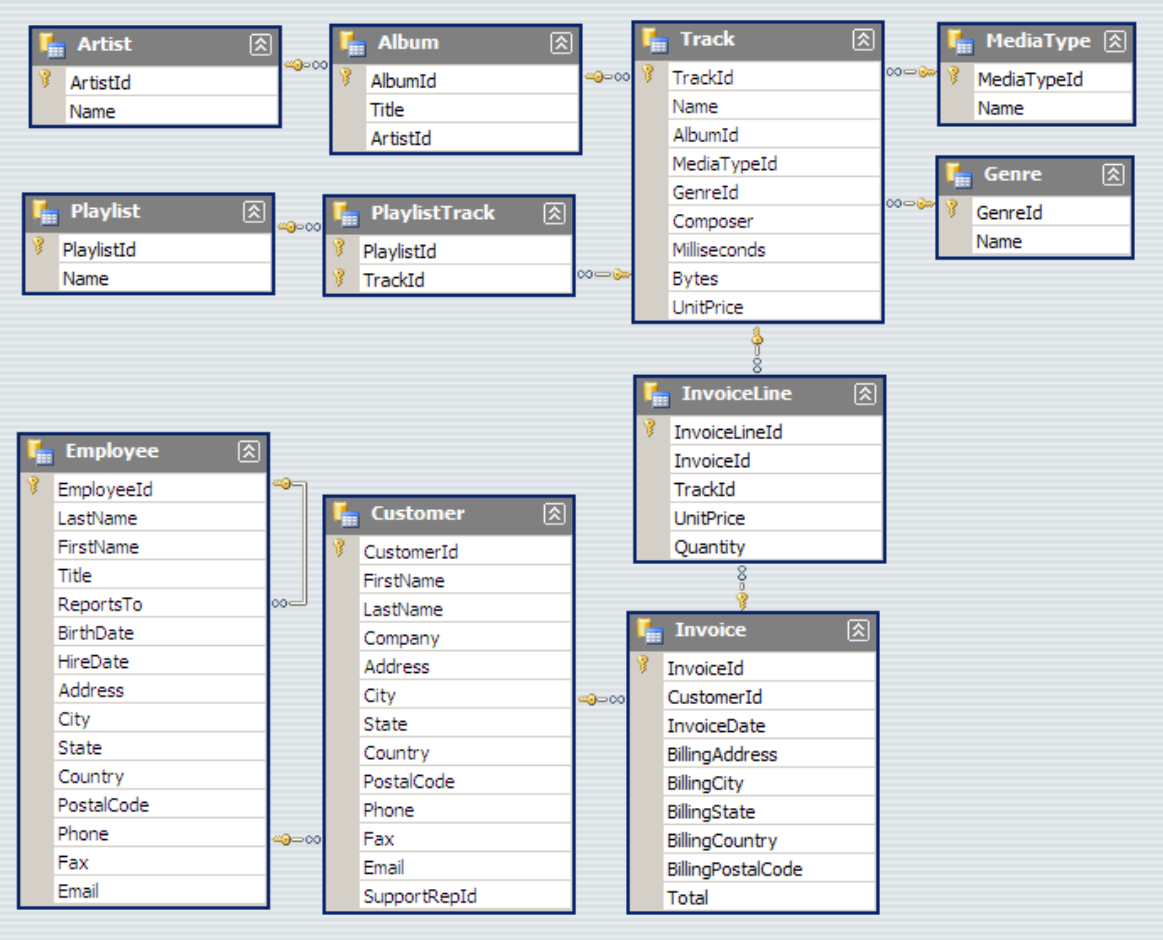
Chinook Database



Chinook data model represents a digital media store, including tables for artists, albums, media tracks, invoices and customers.

Chinook data model is an Entity-Relationship (ER) Model.

TableName	Table_Rows
Album	347
Artist	275
Customer	59
Employee	8
Genre	25
Invoice	412
InvoiceLine	2,240
MediaType	5
Playlist	18
PlaylistTrack	8,715
Track	3,503

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Chinook Database: Tables

- **Employee** table stores employee data such as employee id, last name, first name, etc. It also has a field named ReportsTo to specify who reports to whom.
- **Customer** table stores customers data.
- **Invoice & InvoiceLine** tables: these two tables store invoice data. The invoices table stores invoice header data and the invoice_items table stores the invoice line items data.
- **Artist** table stores artists data. It is a simple table that contains only the artist id and name.
- **Album** table stores data about a list of tracks. Each album belongs to one artist. However, one artist may have multiple albums.
- **MediaType** table stores media types such as MPEG audio and AAC audio files.
- **Genre** table stores **music types** such as rock, jazz, metal, etc.
- **Track** table stores the data of **songs**. Each track belongs to one album.
- **Playlist & Playlist Track** tables: playlists table store data about playlists. Each playlist contains a list of tracks. Each track may belong to multiple playlists. The relationship between the playlists table and tracks table is many-to-many. The PlaylistTrack table is used to reflect this relationship.

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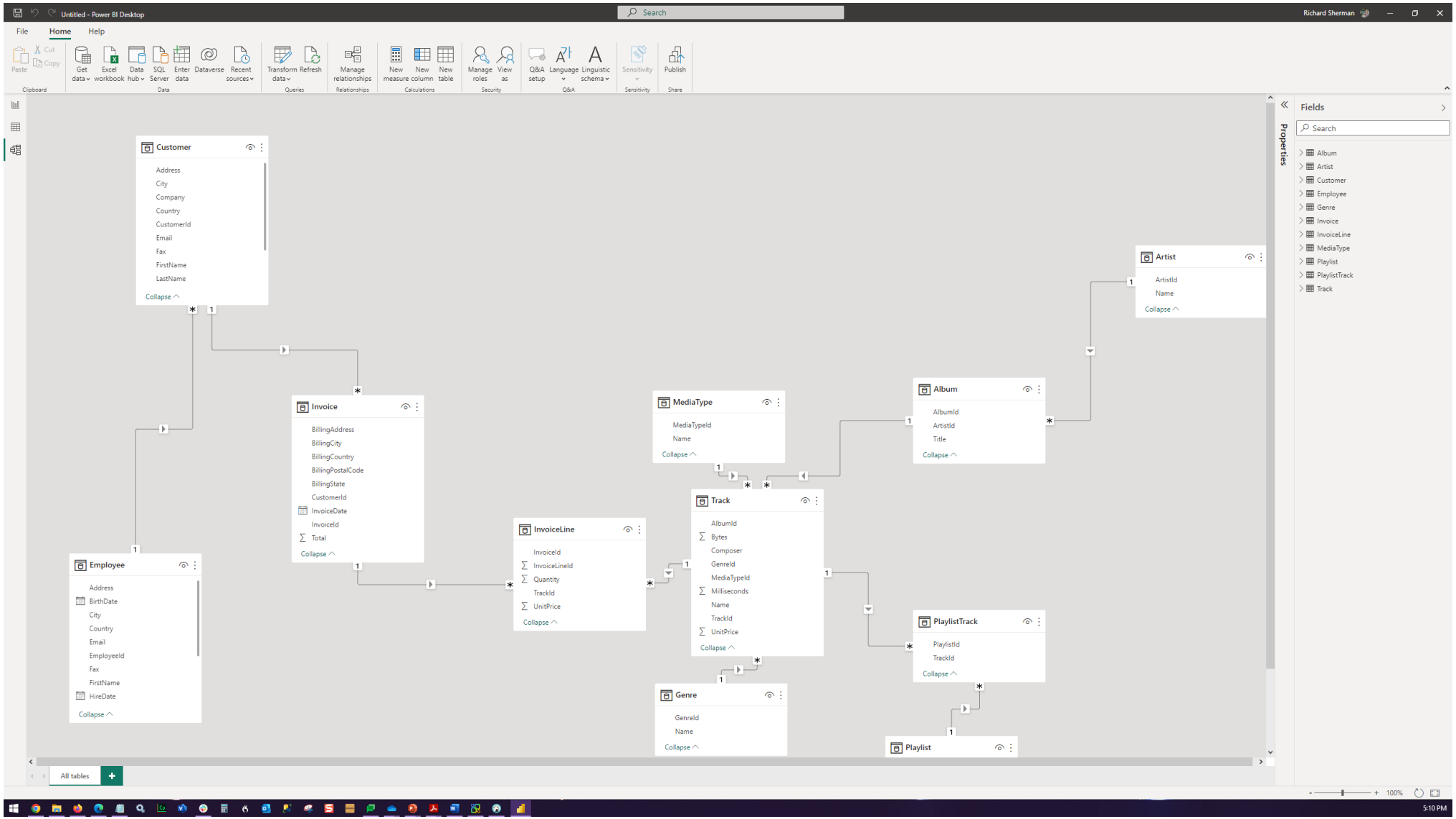
Power BI



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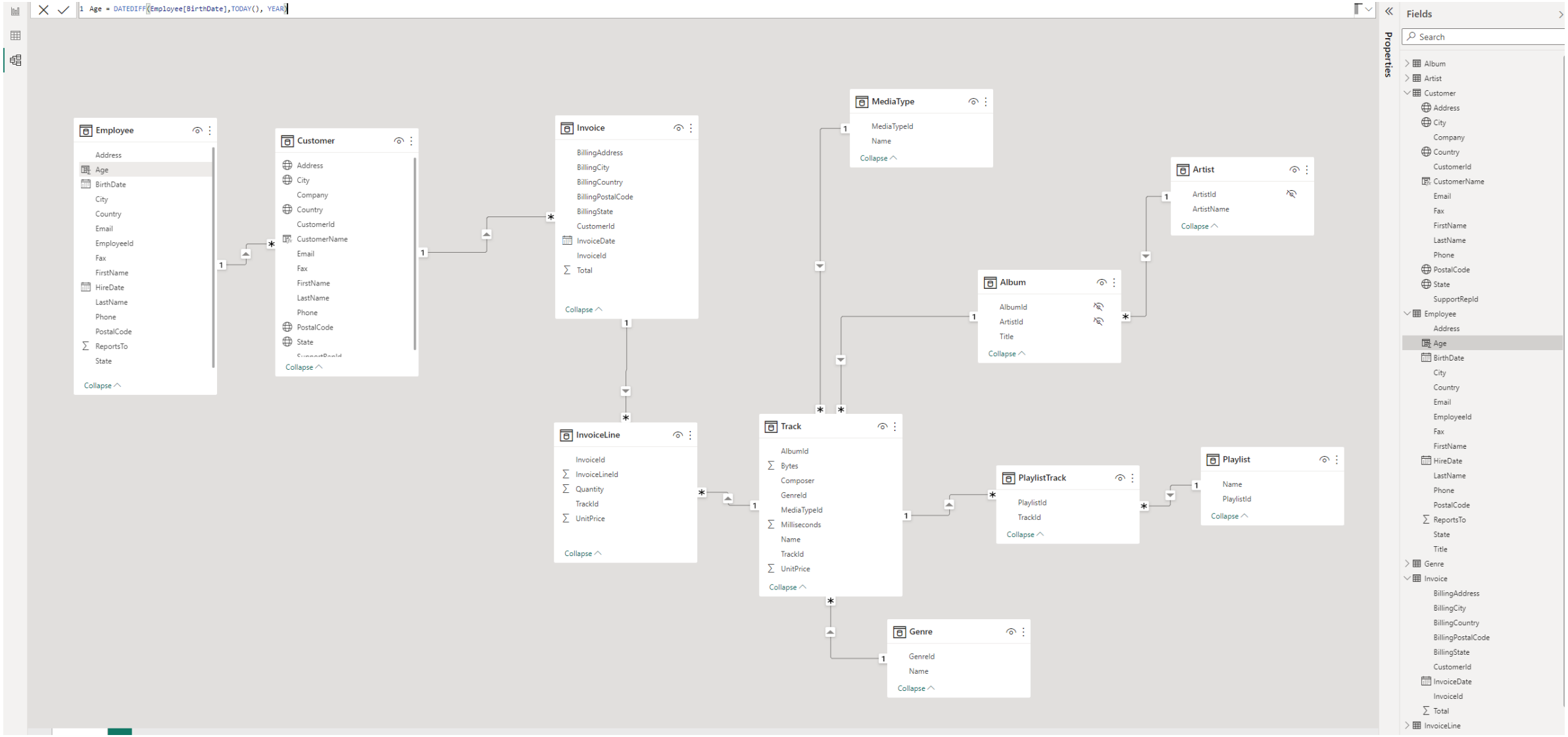
Power BI



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Assignment Microsoft Power BI

A. Answer SQL Queries (vary databases used for queries: Azure SQL, MySQL, PostgreSQL)

B. Create Data Visualizations in Microsoft Power BI (you choose database):

C. Questions:

1. Total sales
2. Total sales by country – ranked
3. Total sales by country, state & city
4. Total sales by customer – ranked
5. Total sales by artist – ranked
6. Total sales by albums
7. Total sales by salesperson (employee)
8. Total tracks bought and total revenue by media type
9. Total Sales by Customer
10. Total Sales by Genre

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