

Please follow the steps below. You can submit your Python code via an HTML/PNG screenshot of a notebook or a .ipynb, .py File. Please ensure whatever you submit shows your SQL and/or Python code.

- 1) Create a Python function to read in the files in the <database.db> file and count the number of records and show the schema/columns for each table.
- 2) Open the attached <ERD.png>, which is a ERD of the database enclosed in the .db file as your guide, in the subsequent steps.
- 3) Write a query in your Python code/Jupyter cell for each of the following questions. Show the result and the SQL string or PANDAs methods you used to get to the correct answer.
*SQL strings to solve all of the questions are not required. We are just concerned about your ability to come up with a solution and deliver an answer to the question using the underlying .db file and Python or Python with SQL.
 - a) By viewing the ERD image, do you think this Database is a Snowflake or a Star schema?
 - b) How many different Customers are there?
 - c) Which Genre has the shortest average track length, in minutes?
 - d) Using the 'playlists' table, can you tell me the name of the artist that appears the most in playlists?
 - e) What is the count of Customers who have bought more than \$40 of tracks?
 - f) Which Key did you use the most?