

Instructions:

Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion.

A (+/-)	55+	C (+/-)	25-39	F (+/-)	<10
B (+/-)	40-54	D (+/-)	10-24		

Notes:

The deployed assignment utilizes **SQL** to complete the challenge. The source code should also be deployed to **Github** or **Gitlab**.

Rubric for Employee Database: A Mystery in Two Parts:

	Mastery 20 points	Approaching Mastery 15 points	Progressing 10 points	Emerging 5-0 points	Incomplete
Data Modeling	<p>The Entity Relationship Diagram includes all correct tables and all of the following:</p> <ul style="list-style-type: none"> ✓ Each table has the correct column names ✓ Each table has the correct corresponding data types ✓ Primary Keys set for each table ✓ Tables are correctly related using Foreign Keys 	<p>The Entity Relationship Diagram includes all correct tables and at least 3 of the following:</p> <ul style="list-style-type: none"> ✓ Each table has the correct column names ✓ Each table has the correct corresponding data types ✓ Primary Keys set for each table ✓ Tables are correctly related using Foreign Keys 	<p>The Entity Relationship Diagram may omit tables, but includes at least 2 of the following:</p> <ul style="list-style-type: none"> ✓ Each table has the correct column names ✓ Each table has the correct corresponding data types ✓ Primary Keys set for each table ✓ Tables are correctly related using Foreign Keys 	<p>The Entity Relationship Diagram may omit tables, but includes at least 1 of the following:</p> <ul style="list-style-type: none"> ✓ Each table has the correct column names ✓ Each table has the correct corresponding data types ✓ Primary Keys set for each table ✓ Tables are correctly related using Foreign Keys <p>-OR-</p> <p>✓ No Entity Relationship Diagram is included.</p>	<p>No submission was received</p> <p>-OR-</p> <p>Submission was empty or blank</p> <p>-OR-</p> <p>Submission contains evidence of academic dishonesty</p>
Data Engineering	<p>All table schemas run without error and include all of the following:</p> <ul style="list-style-type: none"> ✓ All required columns ✓ Columns are set to the correct data type ✓ Primary key for each table ✓ Correctly references related tables using Foreign Keys ✓ Correctly uses <code>NOT NULL</code> condition on necessary columns ✓ Accurately defines value length for columns 	<p>4-5 table schemas run without error and include at least 4 of the following:</p> <ul style="list-style-type: none"> ✓ All required columns ✓ Columns are set to the correct data type ✓ Primary key for each table ✓ Correctly references related tables using Foreign Keys ✓ Correctly uses <code>NOT NULL</code> condition on necessary columns ✓ Accurately defines value length 	<p>2-3 table schemas run without error and include at least 2 the following:</p> <ul style="list-style-type: none"> ✓ All required columns ✓ Columns are set to the correct data type ✓ Primary key for each table ✓ Correctly references related tables using Foreign Keys ✓ Correctly uses <code>NOT NULL</code> condition on necessary columns ✓ Accurately defines value length for columns 	<p>1 table schema runs without error and include at least 1 the following:</p> <ul style="list-style-type: none"> ✓ All required columns ✓ Columns are set to the correct data type ✓ Primary key for each table ✓ Correctly references related tables using Foreign Keys ✓ Correctly uses <code>NOT NULL</code> condition on necessary columns ✓ Accurately defines value length for columns 	

		for columns		-OR- ✓ No table schemas created or the provided schemas do not run	
Data Analysis	Queries provided for all questions and: ✓ All queries provide the expected results ✓ All queries run without error	Queries provided for all questions but: ✓ Queries provide the expected results, with non-efficient code. -OR- ✓ 1-2 queries do not provide the expected result (including errors)	✓ Queries not provided for all of the questions -AND- ✓ 3 queries do not provide the expected result (including errors)	✓ Queries not provided for all of the questions -AND- ✓ 4 or more do not provide the expected result (including errors) -OR- ✓ No queries provided	

Bonus

	Mastery 10 points	Approaching Mastery 5 points	Emerging 0 points
Bonus	The bonus does all of the following: ✓ Correctly queries tables into pandas dataframes ✓ Replaces null values ✓ Correctly merges tables ✓ Plot generated from dataframe ✓ Plot has titles and axis labels	The bonus does 4 of the following: ✓ Correctly queries tables into pandas dataframes ✓ Replaces null values ✓ Correctly merges tables ✓ Plot generated from dataframe ✓ Plot has titles and axis labels	The bonus does 3 or fewer of the following: ✓ Correctly queries tables into pandas dataframes ✓ Replaces null values ✓ Correctly merges tables ✓ Plot generated from dataframe ✓ Plot has titles and axis labels -OR- ✓ Bonus not completed -OR- ✓ Failed to generate plot