

**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 (+/-)	50+	C (+/-)	25-39	F (+/-)	<10
B (+/-)	40-49	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:**

	<b>Mastery 20 points</b>	<b>Approaching Mastery 15 points</b>	<b>Progressing 10 points</b>	<b>Emerging 5-0 points</b>	<b>Incomplete</b>
<b>Data Modeling</b>	<p>The Entity Relationship Diagram includes all correct tables and all of the following:</p> <ul style="list-style-type: none"> <li>✓ Each table has the correct column names</li> <li>✓ Each table has the correct corresponding data types</li> <li>✓ Primary Keys set for each table</li> <li>✓ Tables are correctly related using Foreign Keys</li> </ul>	<p>The Entity Relationship Diagram includes all correct tables and at least 3 of the following:</p> <ul style="list-style-type: none"> <li>✓ Each table has the correct column names</li> <li>✓ Each table has the correct corresponding data types</li> <li>✓ Primary Keys set for each table</li> <li>✓ Tables are correctly related using Foreign Keys</li> </ul>	<p>The Entity Relationship Diagram may omit tables, but includes at least 2 of the following:</p> <ul style="list-style-type: none"> <li>✓ Each table has the correct column names</li> <li>✓ Each table has the correct corresponding data types</li> <li>✓ Primary Keys set for each table</li> <li>✓ Tables are correctly related using Foreign Keys</li> </ul>	<p>The Entity Relationship Diagram may omit tables, but includes at least 1 of the following:</p> <ul style="list-style-type: none"> <li>✓ Each table has the correct column names</li> <li>✓ Each table has the correct corresponding data types</li> <li>✓ Primary Keys set for each table</li> <li>✓ Tables are correctly related using Foreign Keys</li> </ul> <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>
<b>Data Engineering</b>	<p>All table schemas run without error and include all of the following:</p> <ul style="list-style-type: none"> <li>✓ All required columns</li> <li>✓ Columns are set to the correct data type</li> <li>✓ Primary key for each table</li> <li>✓ Correctly references related tables using Foreign Keys</li> <li>✓ Correctly uses <code>NOT NULL</code> condition on necessary columns</li> <li>✓ Accurately defines value length for columns</li> </ul>	<p>4-5 table schemas run without error and include at least 4 of the following:</p> <ul style="list-style-type: none"> <li>✓ All required columns</li> <li>✓ Columns are set to the correct data type</li> <li>✓ Primary key for each table</li> <li>✓ Correctly references related tables using Foreign Keys</li> <li>✓ Correctly uses <code>NOT NULL</code> condition on necessary columns</li> <li>✓ Accurately defines value length</li> </ul>	<p>2-3 table schemas run without error and include at least 2 the following:</p> <ul style="list-style-type: none"> <li>✓ All required columns</li> <li>✓ Columns are set to the correct data type</li> <li>✓ Primary key for each table</li> <li>✓ Correctly references related tables using Foreign Keys</li> <li>✓ Correctly uses <code>NOT NULL</code> condition on necessary columns</li> <li>✓ Accurately defines value length for columns</li> </ul>	<p>1 table schema runs without error and include at least 1 the following:</p> <ul style="list-style-type: none"> <li>✓ All required columns</li> <li>✓ Columns are set to the correct data type</li> <li>✓ Primary key for each table</li> <li>✓ Correctly references related tables using Foreign Keys</li> <li>✓ Correctly uses <code>NOT NULL</code> condition on necessary columns</li> <li>✓ Accurately defines value length for columns</li> </ul>	<p>Submission contains evidence of academic dishonesty</p>

		for columns		-OR- ✓ No table schemas created or the provided schemas do not run	
<b>Data Analysis</b>	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

	<b>Mastery 10 points</b>	<b>Approaching Mastery 5 points</b>	<b>Emerging 0 points</b>
<b>Bonus</b>	The bonus does all of the following:  ✓ Correctly queries tables from the postgres database into pandas dataframes ✓ Replaces null values ✓ Generates an average salary bar chart from a pandas dataframe ✓ Plot has titles and axes labels	The bonus does 3 of the following:  ✓ Correctly queries tables from the postgres database into pandas dataframes ✓ Replaces null values ✓ Generates an average salary bar chart from a pandas dataframe ✓ Plot has titles and axes labels	The bonus does 2 or fewer of the following:  ✓ Correctly queries tables from the postgres database into pandas dataframes ✓ Replaces null values ✓ Generates an average salary bar chart from a pandas dataframe ✓ Plot has titles and axes labels  -OR-  ✓ Bonus not completed  -OR-  ✓ Failed to generate plot