

## SDEV 350 Homework 1 – Oracle Review

### Overview:

This homework serves as a refresher and review of basic concepts using an Oracle database. Be sure to review the reading and complete the tutorials in week 2 prior to completing this assignment. Note, you need to use the Oracle RDS instance you launched on your AWS account for this exercise.

### Assignment: Total 100 points

1. Create an Oracle user and assign appropriate privileges for a schema that will support a unique e-Commerce application.
2. Using PowerPoint, Visio or any graphical tool of your choice, create an Entity Relationship Diagram showing the entities, relationships and primary keys supporting your e-Commerce application. Your application should have at least four (4) entities. The total number of attributes across all entities should be at least fifteen (15). Be sure you use good database design that includes the use of Primary, Foreign, Not Null, and other constraints.
3. Based on your design, create and describe each of your database tables. The tables must be created using SQL DDL statements along with all necessary primary key, foreign key and other integrity constraints. The tables should include comments describing each column that will be displayed using the appropriate Oracle data dictionary views. Perform both a DESC command to show the basic data about your tables' columns, and also perform a SELECT of the data dictionary to show the comments data you've added.
4. Populate your tables with records. The records should represent meaningful data and not placeholder data. You should populate at least 20 records total across all of your tables.
5. Create one database **view** showing the combination of at least two tables resulting from a join. (Hint: Design and test the two-table join first, then create the view using the SQL join you just created (e.g., create view myView as select ... ))
6. Demonstrate your knowledge of select statements by creating at least six (6) queries that will return different data from your tables and view.

### Deliverables:

1. Create a word or PDF document that contains your Entity relationship diagram, table descriptions, and screen shots of you successfully running all of your SQL statements within Oracle 12c. The document should be neat, well-organized, well-written and contain minimal grammar and spelling errors.
2. A .sql script file containing all SQL statements you used for this effort. All SQL statements should be in one file with appropriate connect statements to differentiate users who run the script. The script file should contain comments describe each major set of SQL statements. The script should run perfectly without error when executed from the Oracle SQL Developer environment.

### Grading Rubric:

Attribute	Meets	Does not meet
Create Oracle user	<b>5 points</b> Creates an Oracle user. (3 points)	<b>0 points</b> Does not create an Oracle user.

	<p>Assigns appropriate privileges for a schema that will support a unique e-Commerce application. (2 points)</p>	<p>Does not assign appropriate privileges for a schema that will support a unique e-Commerce application.</p>
Create ERD	<p><b>10 points</b> Creates an Entity Relationship Diagram showing the entities, relationships and primary keys supporting your e-Commerce application. (4 points)</p> <p>Includes at least four (4) entities. (2 points)</p> <p>Includes at least fifteen (15) attributes across all entities (2 points)</p> <p>Includes the use of Primary, Foreign, Not Null, and other constraints. (2 points)</p>	<p><b>0 points</b> Does not create an Entity Relationship Diagram showing the entities, relationships and primary keys supporting your e-Commerce application.</p> <p>Does not include at least four (4) entities.</p> <p>Does not include at least fifteen (15) attributes across all entities</p> <p>Does not include the use of Primary, Foreign, Not Null, and other constraints.</p>
Create Tables	<p><b>20 points</b> Creates and describes each of your database tables. (10 points)</p> <p>Created using SQL DDL statements. (2 points)</p> <p>Includes all necessary primary key, foreign key and other integrity constraints. (4 points)</p> <p>Includes comments describing each column that will be displayed using the appropriate Oracle data dictionary views. Performs both a DESC command to show the basic data about your tables' columns, and also perform a SELECT of the data. (4 points)</p>	<p><b>0 points</b> Does not create or describe each of your database tables.</p> <p>Not created using SQL DDL statements.</p> <p>Does not include all necessary primary key, foreign key and other integrity constraints.</p> <p>Does not include comments describing each column that will be displayed using the appropriate Oracle data dictionary views. Does not perform both a DESC command to show the basic data about your tables' columns, or perform a SELECT of the data.</p>
Insert Records	<p><b>10 points</b> Populates your tables with records. (5 points)</p> <p>Records represent meaningful data and not placeholder data. (2 points)</p>	<p><b>0 points</b> Does not populate your tables with records. (5 points)</p> <p>Records do not represent meaningful data and appear to be placeholder data.</p>

	Populates at least 20 records total across all of your tables. (3 points)	Does not populate at least 20 records total across all of your tables.
Create View	<b>10 points</b> Creates one view from the combination of at least two tables resulting from a join. (10 points)	<b>0 points</b> Does not create one view from the combination of at least two tables resulting from a join.
Use select	<b>20 points</b> Creates at least six (6) queries that will return different data from your tables and view. (20 points)	<b>0 points</b> Does not creates at least six (6) queries that will return different data from your tables and view.
Documentation and submission	<p><b>25 points</b> Creates a word or PDF document that contains your Entity relationship diagram, table descriptions, and screen shots of you successfully running all of your SQL statements within Oracle 12c. (10 points)</p> <p>The document should be neat, well-organized, well-written and contain minimal grammar and spelling errors. (5 points)</p> <p>Provides a .sql script file containing all SQL statements you used for this effort. (2 points)</p> <p>All SQL statements should be in one file with appropriate connect statements to differentiate users who run the script. (2 points)</p> <p>The script file contains comments describing each major set of SQL statements. (2 points)</p> <p>The script runs perfectly without error when executed from the Oracle SQL Developer environment. (4 points)</p>	<p><b>0 points</b> Does not create a word or PDF document that contains your Entity relationship diagram, table descriptions, or screen shots of you successfully running all of your SQL statements within Oracle 12c.</p> <p>The document is not neat, well-organized, well-written and contain multiple grammar and spelling errors.</p> <p>Does not provide a .sql script file containing all SQL statements you used for this effort.</p> <p>All SQL statements are not in one file with appropriate connect statements to differentiate users who run the script.</p> <p>The script file does not contain comments describing each major set of SQL statements.</p> <p>The script does not run perfectly without error when executed from the Oracle SQL Developer environment.</p>