INSTRUCTIONS:
Due Date: **TBD,** before 11:59 PM

Deliverables for phase 2:

1. All queries for the given problems.
2. All SQL statements executed to complete this project (creating database, tables, etc.)
3. Proof of the results (screenshots) of the execution for each SQL statement/query.

Submission Instructions:

1. Only one of the teammates in each group needs to submit the project for grading.
2. Team members' names and IDs should be stated clearly on the first page.
3. A **word document** containing part 1 and part 2 queries and proofs/results. **Do not submit zip files.**
4. File naming convention: <NetId1>_<NetId2>_phase2.doc or<NetId1>_<NetId2>_phase2.**docx**
5. Easily legible screenshots (first page +#of records) for each question and corresponding solution.
6. Missing honor code will cost - 20 points. However, no bonus for the honor code will be provided.
7. Submit your assignment any time before midnight of the due date. Late policy: -5% for each late day.
8. A signed copy of the handwritten Honor Code should be included in every submission. (Failing to add it will cost 20 points)

HONOR CODE
I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.
I promise that I will submit only work that I personally create or that I contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code
I will not participate in any form of cheating/sharing the questions/solutions.

Students are required to NOT share any of the project related documents and solutions with others in any way or form <u>even after the completion of the project</u>. Students may, however, show their projects to interviewers.

Art Gallery Database:
ARTIST (<u>aID</u>, name, birthDate, deathDate, commission, street, city, stateAb, zipcode)
ARTWORK (aID, <u>artID</u>, creationDate, acquisitionDate, price, form)
CONTRACT(<u>aID</u>, <u>coID</u>, startDate, endDate, mRate, orgName,)
CUSTOMER (<u>cID</u>, name, street, city, stateAb, zipcode)
BOUGHT (<u>artID</u>, <u>cID</u>, saleDate)
STATE (<u>stateAb</u>, stateName)
PAYMENTS (<u>pID</u>, artID, upfrontDate, finalDate)
VISITOR (<u>visitorDate</u>, Male, Female) No data is provided for Visitor table. However, you need to include the create statements (in SQL) for VISITOR table too.

Part 1:

1. Write CREATE TABLE statements to create the tables for the Art Gallery database.
2. Each table should correspond to one of the input files.
3. CREATE statements should also include the primary key and the foreign key constraints.
4. Load the data from an input file into the corresponding table.
5. Execute the following simple SQL query/statement on each of the database tables to get the result:
   SELECT * FROM <table name>
6. Include clear screenshots of the output generated on the execution of SELECT queries as a proof of successful execution of CREATE TABLE statements

Part 1: Write all CREATE statements

Part 2: Write the following queries on the database.

Q1. Retrieve the names and address (Street, City, State Abbreviation, and Zipcode) of all the artists in our database whose last name **DOES NOT** start with a vowel.

Column headers: Name, Street, City, stateAb, Zipcode

Q2. Retrieve the names of the artists, and a list of their artwork and its price (title) if they are priced higher than $30,000. Order the result by the price of the artworks.

Column headers: Name, Title, Price

Q3. Retrieve the titles, prices, and the artist names of the 15 most expensive artwork in the gallery.

Column headers: Title, Price, Name

Q4. Retrieve the artist name, art title, artwork price, and the number of days required to sell for the 5 artworks that took the least number of days to be sold. Order the results by the descending order of the number of days required to sell them. The price should be stated with $, appropriate commas, and up to 2 decimal places. (Example: $12,000.00)

Column headers: Name, Title, Price, Days

Q5 Retrieve the names of artists from 'Texas', title of their artwork, and the price for their artworks that cost between 10,000.00 and $12,000.00. List the result in an ascending order by artist name and the price of the artwork. Use 'Texas' in the query and not 'TX'. The price should be stated with $, appropriate commas, and up to 2 decimal places. (Example: $12,000.00)

Column headers: Name, Title, Price

Q6. Retrieve a list of state names (not abbreviations), artist names from each of the states, and the total number of artworks by each artist to have been listed in the Art Gallery. Order the list alphabetically by the state name (not abbreviations) and the number of artworks listed in the gallery. Exclude Oklahoma artists from the list.

Column headers: stateName, Name, Count

Q7. Retrieve, the total, average, maximum, and minimum price of listed artwork of the artists from the state of Texas. You need to use "Texas" in the query. (Assume that query's author does not know the state abbreviations)
The price should be stated with $, appropriate commas, and up to 2 decimal places. (Example: $12,000.00)

Column headers: Sum, Average, Max, Min

Q8a. Retrieve the average, maximum, and minimum price of artworks that were acquired in the month of January.
Q8b Write another query that lets you verify that the result for 8a is correct. Explain how you verify that your answer for Q8a is correct.
The price should be stated with $, appropriate commas, and up to 2 decimal places. (Example: $12,000.00)

Column headers: Average, Max, Min

Q9 Retrieve **a record** that consists of the title, price, and form of the artwork that has the lowest price and the title, price, and form of the artwork that has the highest price

Column headers:

MaxTitle	MaxPrice	MaxForm	MinTitle	MinPrice	MinForm

Q10 Retrieve a **list of 2 records** that each consists of the title and price of the artwork that has the lowest price and another one with the title and price of the artwork that has the highest price

Column headers:

title	price

Q11 Retrieve a **list of records** that each consists of the customer's name, the state that hale from, and the title of the artwork they bought, for all the artwork that was bought by a group of two or more people.

Column headers:

name	stateAb	title

Q12 Retrieve a **list of records** that each consists of the art form, price, name of the artist, and title of the artwork that have been sold. Sort the list of records by the art form and the price. The price should be stated with $, appropriate commas, and up to 2 decimal places. (Example: $12,000.00)

Column headers:

form ▲ 1	price	name	title

Q13 Retrieve a **list of records** that each consists of the artist name and the number of their artwork that has not been sold yet. Sort the list by the artist name.

Column headers:

name ▲ 1	No of Unsold Art Pieces

Q14. Execute a command to delete a record that violates a referential integrity constraint. State the message produced by the DBMS.

Q15 Execute 3 insert commands for Officials table that attempt to insert records, such that the records violate the **explicit schema-based constraints (Key, Entity Integrity, Referential Integrity constraints)**. Make each of the 3 records violate a different types of integrity constraint. Include the insert statements and the error messages produced.

Q16 Execute an update command for Officials table that attempts to update records in **child rows**, such that the record violate the foreign key constraint. Include the update statement and the error message.