****Part 1****: Creating and updating the database

1. Before starting the lab download *GameStore.sqlite* file from Canvas. Import the database on SQLite Studio.

2. Create a new table called “Developer” with the following requirements.

1. Attributes:
   1. DevID: INTEGER, Primary Key, NOT NULL
   2. DevName: varchar(50)
   3. GameName: varchar(50), FK referencing Game’s Name field
   4. Address: varchar(60)
   5. NumberOfEmployees: smallint

1. Add data to this table by importing the *Developers.csv* file.

4.****Post the code you used to create Developer on the answer sheet.****

            CREATE TABLE Developer (

DevID INTEGER PRIMARY KEY

NOT NULL,

DevName VARCHAR (50),

GameName VARCHAR (50),

Address VARCHAR (60),

NumberOfEmployee SMALLINT

);

****Part 2:**** Queries

1. Fill in the missing blanks of the following queries. Post the completed query on the answer sheet.

List in alphabetical order the name and platform of all games that cost less than $50.00

SELECT Name, Platform

FROM Game

WHERE \_Price\_\_\_\_\_\_\_\_\_ < \_\_\_50\_\_\_\_\_\_\_

ORDER BY \_\_Price\_\_\_\_\_\_\_\_;

1. List Player names and the games they own for Players older than age 50.

SELECT PlayerName, Name

FROM Player, Own

WHERE \_\_\_Player.Email\_\_\_\_\_\_\_ = \_\_\_Owns.Email\_\_\_\_\_\_\_ AND \_\_age\_\_\_\_\_\_\_\_ > \_\_\_50\_\_\_\_\_\_\_

1. List the player name and age of all players who have commented on a game of the FPS genre

SELECT Player.PlayerName, Player.Age

FROM Player

WHERE Player.Email IN (

  SELECT \_\_\_\_Comment.Name = BelongsTo.Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

  FROM Comment, BelongsTo

  WHERE BelongsTo.Name = Comment.Name

  AND \_\_\_\_\_\_GameGenre\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = ‘FPS’

);

1. Post the code of the following queries on the answer sheet.

List the Name and Website of all games on with a platform value of ‘All’.

Select Name, Website

From Game

Where game.Platform = 'All';

1. List the PlayerName and the number of games owned by the 2 customers with the highest number of games. List the rows in descending order by the number of games.

 Select Player.PlayerName, Count(Owns.Name)

From Player, Owns,Game

WhERE Owns.Name = Game.Name and Player.Email = Owns.Email

Group by Player.Email

Order by Count(Owns.Name) DESC limit 2;

1. In the database each Game has a different price. List the average Game price for each Player from. Order by average price in descending order.

 SELECT avg(price) As average,Player.PlayerName

FROM Game,Player,Owns

Where Game.Name = Owns.Name and Player.Email = Owns.Email

Group by Player.Email

Order by average DESC;

1. Each Player has Preferred genres of games. List all games by player that aren’t owned by a player who prefers its Genre. Return game name, genre, and player name.

1. Come up with your own query. Include at least one join and one operation from MAX/MIN/COUNT/AVG. Post your code on the answer sheet and briefly describe what the query does. Also, briefly mention why do you think the results of the query might be useful for the company.

 SELECT DevName, Game.Name,MAX(NumberOfEmployee)

FROM (Developer join Game on Game.Name = Name)

Where price > 40;

List the max number of employee of developers who has a game that price is larger than 40;

****Part 3:**** Views

1. Create a view that computes the total price of games sold to players by developer. Include the Developer, the number of employees, and the total price of games they have sold. Post the code of your solution on the answer sheet.

CREATE VIEW table AS

SELECT DevName,

NumberOfEmployee,

Sum(Price)

FROM Developer,

Game

GROUP BY DevName;

1. Using this view, look up the average amount of sales for all developers.

****Answer Sheet****

****Part 1****: Creating and updating the database

*Insert your code for creating Products table:*

****Part 2:**** Simple and Nested queries

1.

            a.

            b.

            c.

2.

            a.

            b.

            c.

            d.

****Part 3:**** Views

1.

            a.

1. Screenshot: