EMINE UYSAL - 501304049

CIND 119: Introduction to Big Data Analytics Assignment 2
(15% of the final grade)
Querying an RDBMS database using SQLite Studio

Complete this assignment using SQLite Studio.

Question 1: Create an SQLite database called "sample".

Question 2: Within the "sample" database, create a table called "test_data" and load the following data into the table: (5 points)

Order_ID	Product_Name	Category	Quantity	Price
1	Laptop	Electronics	5	500
2	Headphones	Electronics	3	100
3	Chair	Furniture	2	200
4	Desk	Furniture	1	400
5	iPhone	Electronics	2	800
6	Book	Books	10	20
7	Shoes	Apparel	4	150
8	T-shirt	Apparel	7	50
9	Watch	Apparel	1	250
10	Blender	Home Appliance	1	300
11	Fridge	Home Appliance	1	1200
12	Cookware Set	Home Appliance	3	100
13	Vacuum Cleaner	Home Appliance	1	350
14	Keyboard	Electronics	2	75
15	Monitor	Electronics	1	200

Question 3: Write SQL queries to select/compute data from the "test_data" table. (2 points each)

a. Select the Product_Name and Price of products where the Category is 'Electronics'.
b. Compute the average price of products in the 'Apparel' category.
c. Select all fields of products where the price is less than 200.
d. Select the Order_ID and Product_Name of products where the Quantity is equal to 1.
e. Compute the total revenue (Price * Quantity) for each Category.

a.Select the Product_Name and Price of products where the Category is 'Electronics'

```
SELECT Product_Name, Price
FROM test_data
WHERE Category = 'Electronics';
```

#	Product_Name	Price
1	Laptop	500
2	Headphones	100
3	iPhone	800
4	Keyboard	75
5	Monitor	200

b. Compute the average price of products in the 'Apparel' category.

```
SELECT AVG(Price) AS Avg_Apparel_Price
FROM test_data
WHERE Category = 'Apparel';
```

#	Avg_Apparel_Price
1	150

Document generated with SQLiteStudio v 3.4.4

c. Select all fields of products where the price is less than 200.

```
SELECT *FROM test_data
WHERE Price < 200;
```

#	Order_ID	Product_Name	Category	Quantity
1	2	Headphones	Electronics	3
2	6	Book	Books	10
3	7	Shoes	Apparel	4
4	8	T-shirt	Apparel	7
5	12	Cookware Set	Home Appliance	3
6	14	Keyboard	Electronics	2

#	Price
1	100
2	20
3	150
4	50
5	100
6	75

d. Select the Order_ID and Product_Name of products where the Quantity is equal to 1.

```
SELECT Order_ID, Product_Name
FROM test_data
WHERE Quantity = 1;
```

#	Order_ID	Product_Name
1	4	Desk
2	9	Watch
3	10	Blender
4	11	Fridge
5	13	Vacuum Cleaner
6	15	Monitor

e. Compute the total revenue (Price * Quantity) for each Category.

```
SELECT Category, SUM(Price * Quantity) AS Total_Revenue
FROM test_data
GROUP BY Category;
```

#	Category	Total_Revenue
1	Apparel	1200
2	Books	200
3	Electronics	4750
4	Furniture	800
5	Home Appliance	2150