CIND 119: Introduction to Big Data Analytics Assignment 2

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)

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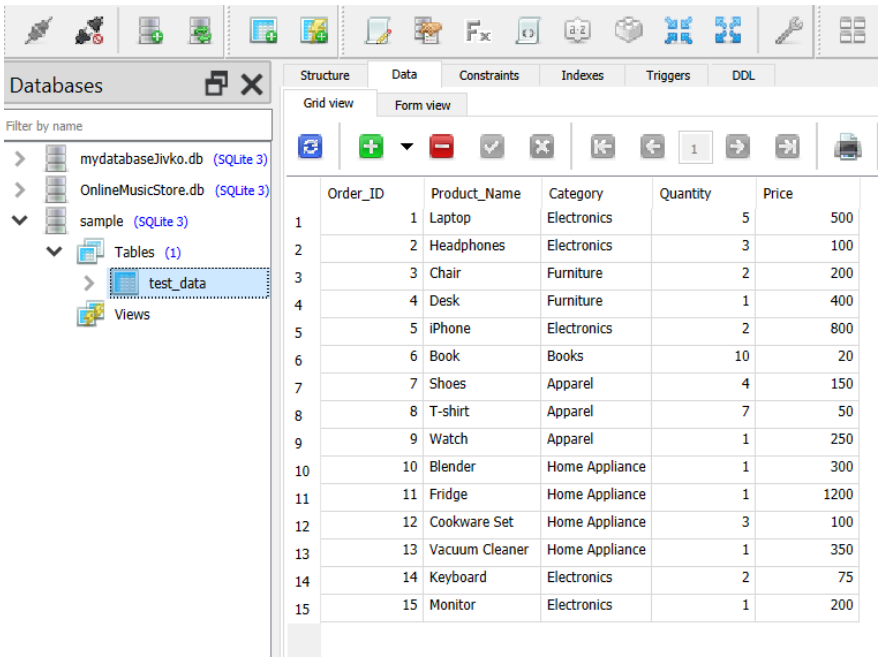
--Question 2--
CREATE TABLE test_data (
    Order_ID INT PRIMARY KEY,
    Product_Name VARCHAR(100),
    Category VARCHAR(50),
    Quantity INT,
    Price INT
);
```



	Order_ID	Product_Name	Category	Quantity	Price
1	1	Laptop	Electronics	5	500
2	2	Headphones	Electronics	3	100
3	3	Chair	Furniture	2	200
4	4	Desk	Furniture	1	400
5	5	iPhone	Electronics	2	800
6	6	Book	Books	10	20
7	7	Shoes	Apparel	4	150
8	8	T-shirt	Apparel	7	50
9	9	Watch	Apparel	1	250
10	10	Blender	Home Appliance	1	300
11	11	Fridge	Home Appliance	1	1200
12	12	Cookware Set	Home Appliance	3	100
13	13	Vacuum Cleaner	Home Appliance	1	350
14	14	Keyboard	Electronics	2	75
15	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'.

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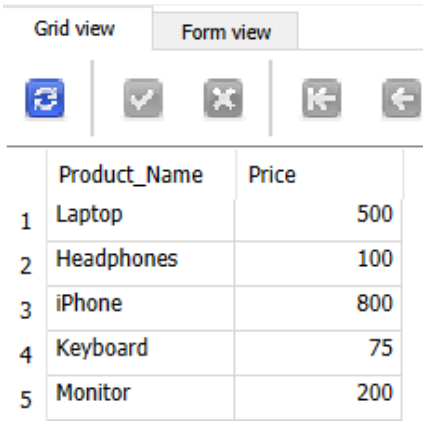
--a: Select the Product_Name and Price of products where the Category is 'Electronics'.--
```

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.

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

SELECT AVG(Price) AS Average_Price

FROM test_data

WHERE Category = 'Apparel';

	Average_Price
1	150

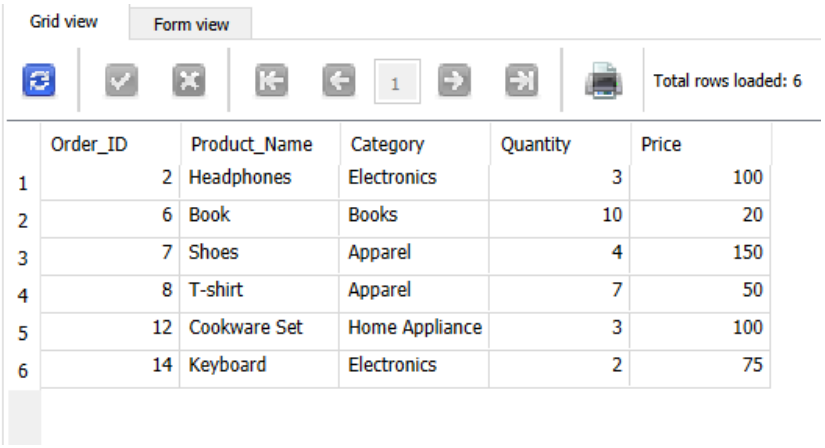
c. Select all fields of products where the price is less than 200.

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

SELECT Order_ID, Product_Name, Category, Quantity, Price

FROM test_data

WHERE Price < 200;


Grid view | Form view

Total rows loaded: 6

	Order_ID	Product_Name	Category	Quantity	Price
1	2	Headphones	Electronics	3	100
2	6	Book	Books	10	20
3	7	Shoes	Apparel	4	150
4	8	T-shirt	Apparel	7	50
5	12	Cookware Set	Home Appliance	3	100
6	14	Keyboard	Electronics	2	75

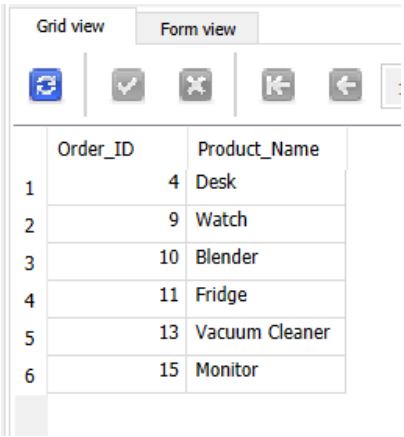
d. Select the Order_ID and Product_Name of products where the Quantity is equal to 1.

--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;


Grid view | Form view

	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.

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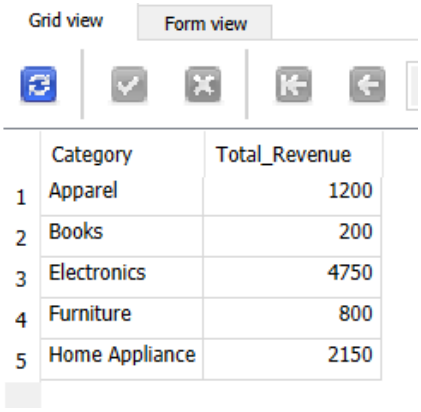
--e. Compute the total revenue (Price * Quantity) for each Category--
SELECT Category,
    SUM(Price * Quantity) AS Total_Revenue
FROM test_data
GROUP BY Category;
```



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