Coding Practice- 01

Consider an e-commerce company like Amazon that holds the data of a wide variety of products. While shopping online, we often search for the product or brand with a partial name over giving the exact name of the product. And, while applying filters, we tend to select if the price/rating is greater than a certain number over mentioning the exact number.

Comparison operators such as LIKE, equal to(=), greater than(>) help us fetch data for such queries.

Similar to the e-commerce scenario, we have a database that contains a range of products with details like the name of the product, category it belongs to, price, brand and rating. Help the user get the desired products by writing SQL queries satisfying user requirements.

Note: Expected output format for all the queries, unless specified.

name	category	price	brand	rating
Black Shirt	Clothing	900	Puma	4.8
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1. Get all details of products from the "Puma" brand.

SELECT * FROM product WHERE brand LIKE 'Puma';

2. User would like to shop for "Jeans". A common pattern in all the jeans products is that their `name` *ends with "Jeans"*. Help the user get the details of required products.

SELECT * FROM product WHERE name LIKE "%Jeans";

3. User wants to purchase "Bourbon Small", "Bourbon With Extra Cookies", or products from bourbon. Retrieve all details of such products accordingly.

   Hint: All the product whose `name` starts with "Bourbon".

SELECT * FROM product WHERE name LIKE "Bourbon%";

4. List all the "Chips" in the database.
   Note: Consider the products that have "Chips" in the `name`.

SELECT * FROM product WHERE name LIKE "%Chips%";

5. Get the products whose `name` matches the following pattern:

- `name` endswith at least four characters,
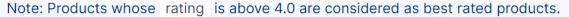- Out of the last 4 characters, first character is "h" and the third character is "r".

SELECT * FROM product WHERE name LIKE "%h_r_";

6. Get all the products whose `price` is less than or equal to 1000.

SELECT * FROM product WHERE price <= 1000;

7. Get all the best rated products.
   Note: Products whose `rating` is above 4.0 are considered as best rated products.

SELECT * FROM product WHERE rating > 4.0;

Product Table

name	category	price	brand	rating
Blue Shirt	Clothing	750	Denim	3.8
Blue Jeans	Clothing	800	Puma	3.6
Black Jeans	Clothing	750	Denim	4.5
Blue Shirt	Clothing	1000	Puma	4.3
Chocolate Cake	Food	25	Britannia	3.7
Strawberry Cake	Food	60	Cadbury	4.1
Chocolate Cake	Food	60	Cadbury	2.5
Strawberry Cake	Food	10	Britannia	4.6
Smart Watch	Gadgets	17000	Apple	4.9
Smart Cam	Gadgets	2600	Realme	4.7
Smart TV	Gadgets	40000	Sony	4
Bourbon Small	Food	10	Britannia	3.9

name	category	price	brand	rating
Bourbon Special	Food	15	Britannia	4.6
Bourbon With Extra Cookies	Food	30	Britannia	4.4
White Shirt	Clothing	700	Denim	4.3
Black Shirt	Clothing	600	Puma	4.8
Black T-Shirt	Clothing	600	Roadster	4.2
White T-Shirt	Clothing	700	Levi's	4
Blue T-Shirt	Clothing	600	Nike	4.7
Realme Smart Band	Gadgets	3000	Realme	4.6
Raw Cashew	Food	370	Absa	3.9
Cashew Nuts	Food	550	Upcrop	4.3
Chocolate Cashew	Food	670	Urban Platter	3.5
Potato Chips India's Magic Masala	Food	42	Lay's	4.4
Banana Chips	Food	550	Calicut Kerala	4.3
Potato Chips Cream & onion	Food	63	Lay's	4.5
Potato Chips Classic Salted	Food	45	Lay's	4
Harry Potter and the Philosopher's Stone	Novel	222		4.7
Harry Potter and the Chamber of Secrets	Novel	343		4.4
Harry Potter and the Prisoner of Azkaban	Novel	284		4.2
Harry Potter and the Goblet of Fire	Novel	431		4.6
OnePlus 6T	Smartphone	32990	OnePlus	4.5
Redmi K20	Smartphone	24999	Redmi	4.1