

Coding Practice- 02

Consider an e-commerce company like Amazon that holds the data of a wide variety of products. On such platforms, users often search for products by applying multiple conditions at once.

For example, user could ask for shoes from Puma brand, that have ratings greater than 4.0 (and price less than 5000).

With logical operators, we can perform queries based on multiple conditions.

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 the details of products that belong to "Clothing" category and price less than 700.



```
SELECT * FROM product WHERE category = "Clothing" AND price < 700;
```

2. Get all the details of products that belong to "Denim" brand with rating greater than 4.



```
SELECT * FROM product WHERE brand = "Denim" AND rating > 4;
```

3. Get all the best-rated products with price less than or equal to 1000.

Note: Assume that the products with rating greater than 4.0 as best rated products.



```
SELECT * FROM product WHERE price <= 1000 AND rating > 4.0;
```

4. Get all the products from the product table whose

- rating is above 3.6 *and*
- price is less than 1000 *and*
- Belongs to "Puma" brand



```
SELECT * FROM product WHERE rating > 3.6 AND price < 1000 AND brand = 'Puma';
```

5. Get all the products from "Puma", "Denim" or "Nike" brands.



```
SELECT * FROM product WHERE brand IN ('Puma', 'Denim', 'Nike');
```

6. Get all the details of products whose



- brand is "Redmi" with rating greater than 4 *or*
- products that belong to "OnePlus" brand.

```
SELECT * FROM product WHERE (brand = 'Redmi' AND rating > 4) OR brand = 'OnePlus';
```

7. Get only cakes from "Cadbury" and "Britannia" brands that have rating greater than 4.0.



Note: Consider the products that have "Cake" in `name` as cakes.

```
SELECT * FROM product WHERE (name LIKE '%cake%') AND (brand = 'Cadbury' OR brand = 'Britannia') AND rating > 4.0;
```

8. Get all the details of the products from the `product` table whose



- `brand` is "Puma" and rating greater than 3.5 **or**
- `brand` is "Denim" and rating greater than 4.0

```
SELECT * FROM product WHERE (brand LIKE 'Puma' AND rating > 3.5) OR (brand LIKE 'Denim' AND rating > 4.0);
```

9. Get all the shirts available in "Puma", "Nike" or "Levi's" brands, excluding the black colour shirts.



Note:

You can assume that:

1. Products containing "Shirt" in name are considered as shirts.
2. Black colour shirts contain "Black" in their names.

```
SELECT * FROM product WHERE ((name LIKE '%shirt%') AND (NOT name LIKE '%black%')) AND (brand = 'Puma' OR brand = 'Nike' OR brand = 'Levi's');
```

Product Table

name	category	price	brand	rating
Blue Shirt	Clothing	750	Denim	3.8

name	category	price	brand	rating
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
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

name	category	price	brand	rating
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