-- 1.1 Select the names of all the products in the store.

SELECT name FROM products;

-- 1.2 Select the names and the prices of all the products in the store.

SELECT name, price FROM products;

-- 1.3 Select the name of the products with a price less than or equal to $200.

SELECT name FROM products WHERE price <= 200;

-- 1.4 Select all the products with a price between $60 and $120.

SELECT \* FROM products WHERE price BETWEEN 60 AND 120;

-- 1.5 Select the name and price in cents (i.e., the price must be multiplied by 100).

SELECT name, price \* 100 AS price\_in\_cents FROM products;

-- 1.6 Compute the average price of all the products.

SELECT AVG(price) AS average\_price FROM products;

-- 1.7 Compute the average price of all products with manufacturer code equal to 2.

SELECT AVG(price) AS average\_price FROM products WHERE manufacturer\_code = 2;

-- 1.8 Compute the number of products with a price larger than or equal to $180.

SELECT COUNT(\*) AS count FROM products WHERE price >= 180;

-- 1.9 Select the name and price of all products with a price larger than or equal to $180, and sort first by price (in descending order), and then by name (in ascending order).

SELECT name, price FROM products WHERE price >= 180 ORDER BY price DESC, name ASC;

-- 1.10 Select all the data from the products, including all the data for each product's manufacturer.

SELECT p.\*, m.\* FROM products p JOIN manufacturers m ON p.manufacturer\_code = m.code;

-- 1.11 Select the product name, price, and manufacturer name of all the products.

SELECT p.name AS product\_name, p.price, m.name AS manufacturer\_name

FROM products p

JOIN manufacturers m ON p.manufacturer\_code = m.code;

-- 1.12 Select the average price of each manufacturer's products, showing only the manufacturer's code.

SELECT manufacturer\_code, AVG(price) AS average\_price

FROM products

GROUP BY manufacturer\_code;

-- 1.13 Select the average price of each manufacturer's products, showing the manufacturer's name.

SELECT m.name AS manufacturer\_name, AVG(p.price) AS average\_price

FROM products p

JOIN manufacturers m ON p.manufacturer\_code = m.code

GROUP BY m.name;

-- 1.14 Select the names of manufacturer whose products have an average price larger than or equal to $150.

SELECT m.name

FROM products p

JOIN manufacturers m ON p.manufacturer\_code = m.code

GROUP BY m.name

HAVING AVG(p.price) >= 150;

-- 1.15 Select the name and price of the cheapest product.

SELECT name, price FROM products ORDER BY price ASC LIMIT 1;

-- 1.16 Select the name of each manufacturer along with the name and price of its most expensive

SELECT m.name AS manufacturer\_name, p.name AS product\_name, p.price

FROM products p

JOIN manufacturers m ON p.manufacturer\_code = m.code

WHERE (p.price, p.manufacturer\_code) IN (

SELECT MAX(price), manufacturer\_code

FROM products

GROUP BY manufacturer\_code

);product.

-- 1.17 Add a new product: Loudspeakers, $70, manufacturer 2.

INSERT INTO products (name, price, manufacturer\_code) VALUES ('Loudspeakers', 70, 2);

-- 1.18 Update the name of product 8 to "Laser Printer".

UPDATE products SET name = 'Laser Printer' WHERE id = 8;

-- 1.19 Apply a 10% discount to all products.

UPDATE products SET price = price \* 0.9;

-- 1.20 Apply a 10% discount to all products with a price larger than or equal to $120.

UPDATE products SET price = price \* 0.9 WHERE price >= 120;