DBMS Assessment Solution

Step 1: Create Table

```
CREATE TABLE product (
    pro_id INT PRIMARY KEY,
    pro_name VARCHAR(50),
    pro_price DECIMAL(10,2),
    company_code VARCHAR(10)
);
```

Step 2: Insert Sample Data

```
INSERT INTO product (pro_id, pro_name, pro_price, company_code) VALUES
(1, 'Keyboard', 300, 'C01'),
(2, 'Mouse', 150, 'C01'),
(3, 'Monitor', 5000, 'C02'),
(4, 'Speaker', 800, 'C02'),
(5, 'Motherboard', 4500, 'C03'),
(6, 'USB Cable', 100, 'C01');
```

Step 3: Queries

1. Items with price ≥ 250 (descending price, ascending name)

```
SELECT pro_name, pro_price
FROM product
WHERE pro_price >= 250
ORDER BY pro_price DESC, pro_name ASC;
```

2. Cheapest item

```
SELECT pro_name, pro_price
FROM product
WHERE pro_price = (SELECT MIN(pro_price) FROM product);
```

3. Average price of items for each company

```
SELECT company_code, AVG(pro_price) AS avg_price
FROM product
GROUP BY company_code;
```

4. Average total price of all products

```
SELECT AVG(pro_price) AS overall_avg_price
FROM product;
```