Lab: Spring Data Advanced Querying

This document defines the lab assignments for the "Spring Data" course @ Software University.

You are given a simpler implementation of the Shampoo Company. Now it's time to start writing some query methods to retrieve data.

Before you start, insert the data from the "shampoo-company-insert.sql" file!

1. Select Shampoos by Size

Create a method that selects all shampoos with a given size, ordered by shampoo id.

Example:

Input	Output
MEDIUM	Nature Moments Mediterranean Olive Oil & Aloe Vera MEDIUM 6.50lv.
	Volume & Fullness Lavender MEDIUM 5.50lv.
	Rose Shine & Hydration MEDIUM 6.50lv.
	Color Protection & Radiance MEDIUM 6.75lv.
	Heavenly Long Long-Hair MEDIUM 7.50lv.
	Sea Buckthorn Vital MEDIUM 6.50lv.
	Fresh it Up! MEDIUM 7.651v.
	Nectar Nutrition MEDIUM 6.851v.

2. Select Shampoos by Size or Label

Create a method that selects all shampoos with a given size or label id. Sort the result ascending by price.

Example:

Input	Output
MEDIUM	Volume & Fullness Lavender MEDIUM 5.50lv.
10	Intense-Charm Brunette SMALL 5.50lv.
	Nature Moments Mediterranean Olive Oil & Aloe Vera MEDIUM 6.50lv.
	Rose Shine & Hydration MEDIUM 6.50lv.
	Sea Buckthorn Vital MEDIUM 6.50lv.
	Color Protection & Radiance MEDIUM 6.751v.
	Nectar Nutrition MEDIUM 6.851v.
	Heavenly Long Long-Hair MEDIUM 7.50lv.
	Fresh it Up! MEDIUM 7.65lv.
	Active-Caffeine SMALL 7.80lv.

3. Select Shampoos by Price

Create a method that selects all shampoos, which price is higher than a given price. Sort the result descending by price.















Example:

Input	Output
5	Superfruit Nutrition LARGE 13.80lv.
	Cotton Fresh LARGE 13.60lv.
	Color Protection & Radiance LARGE 11.50lv.
	Rose Shine & Hydration LARGE 10.70lv.
	Nectar Nutrition LARGE 10.50lv.
	Keratin Strong SMALL 8.80lv.
	Superfruit Nutrition SMALL 8.80lv.
	Cotton Fresh SMALL 8.80lv.
	Keratin Strong LARGE 8.80lv.
	Volume & Fullness Lavender LARGE 8.50lv.

4. Select Ingredients by Name

Create a method that selects all ingredients, which name starts with given letters.

Example:

Input	Output
М	Macadamia Oil
	Mineral-Collagen
	Micro Crystals

5. Select Ingredients by Names

Create a method that selects all **ingredients**, which are **contained in a given list**. Sort the result **ascending by price**.

Example:

Input	Output
Lavender	Apple
Herbs	Lavender
Apple	Herbs

6. Count Shampoos by Price

Create a method that counts all shampoos with price lower than a given price.

Example:

Input	Output
8.50	15











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7. Select Shampoos by Ingredients

Create a method that selects all shampoos with ingredients included in a given list.

Example:

Input	Output
Berry	Superfruit Nutrition
Mineral-Collagen	Color Protection & Radiance
	Volume & Fullness Lavender
	Keratin Strong
	Nature Moments Mediterranean Olive Oil & Aloe Vera
	Nectar Nutrition
	Fresh it Up!

8. Select Shampoos by Ingredients Count

Create a method that selects all shampoos with ingredients less than a given number.

Example:

Input	Output
2	Moroccan Argan Oil & Macadamia
	Volume & Fullness Lavender
	Sea Buckthorn Vital
	Active-Caffeine

9. Delete Ingredients by Name

Create a method that deletes ingredients by a given name. Use named query.

Update Ingredients by Price 10.

Create a method that increases the price of all ingredients by 10%. Use named query.

11. Update Ingredients by Names

Create a method that updates the price of all ingredients, which names are in a given list.













