Filter the products which contains the word “Tea” and calculate the total for each year.

import java.util.ArrayList;

import java.util.HashMap;

import java.util.List;

import java.util.Map;

import java.util.stream.Collectors;

public class TeaTotal {

public static void main(String[] args) {

List<Product> products = new ArrayList<>();

products.add(new Product("Green Tea", 2022, 10.0));

products.add(new Product("Black Tea", 2022, 5.0));

products.add(new Product("Herbal Tea", 2021, 8.0));

products.add(new Product("Iced Tea", 2021, 12.0));

products.add(new Product("Chai Tea", 2023, 15.0));

Map<Integer, Double> teaTotalsByYear = products.stream()

.filter(p -> p.getName().contains("Tea"))

.collect(Collectors.groupingBy(Product::getYear, Collectors.summingDouble(Product::getPrice)));

System.out.println("Tea totals by year:");

teaTotalsByYear.forEach((year, total) -> System.out.println(year + ": " + total));

}

}

class Product {

private String name;

private int year;

private double price;

public Product(String name, int year, double price) {

this.name = name;

this.year = year;

this.price = price;

}

public String getName() {

return name;

}

public int getYear() {

return year;

}

public double getPrice() {

return price;

}

}

Summar:

This program creates a list of products and calculates the total sales for each year for all products that contain the word "Tea" in their name using streams and lambda expressions. It uses the Product class to represent each item in the list and has three fields: name, year, and price. The program filters out all products that do not contain the word "Tea" and then groups the remaining products by year and sums up their prices to calculate the total sales for each year. Finally, it prints out the tea totals by year in the console.