Exercise 2 : E-commerce Platform Search Function

import java.util.\*;

class Product {

String name;

String category;

Product(String name, String category) {

this.name = name;

this.category = category;

}

public void display() {

System.out.println("Product: " + name + " | Category: " + category);

}

}

class SMart {

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

public SMart() {

products.add(new Product("Laptop - i7", "Electronics"));

products.add(new Product("NeetCode DSA Sheet", "Education"));

products.add(new Product("Deadlift Barbell", "Fitness"));

products.add(new Product("Compiler Design Notes", "Education"));

products.add(new Product("Smartwatch", "Electronics"));

products.add(new Product("Gym T-shirt", "Fitness"));

}

public void search(String keyword) {

System.out.println("\nSearching for: " + keyword);

boolean found = false;

for (Product p : products) {

if (p.name.toLowerCase().contains(keyword.toLowerCase()) ||

p.category.equalsIgnoreCase(keyword)) {

p.display();

found = true;

}

}

if (!found) {

System.out.println("No products found for \"" + keyword + "\"");

}

}

}

public class Main {

public static void main(String[] args) {

SMart mart = new SMart();

mart.search("Fitness");

mart.search("Compiler");

mart.search("Veggie");

}

}

Output:

