**TOPIC : DATA STRUCTURES AND ALGORITHMS**

EXERCISE 3: E-commerce Platform Search function

public class Product {

String name;

double price;

public Product(String name, double price) {

this.name = name;

this.price = price;

}

public void show() {

System.***out***.println(name + " : Rs." + price);

}

}

import java.util.ArrayList;

public class ShowProduct {

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

public ShowProduct() {

products.add(new Product("iPhone 15", 79999));

products.add(new Product("Samsung Galaxy S24", 74999));

products.add(new Product("MacBook Air", 99999));

products.add(new Product("Apple Watch", 29999));

products.add(new Product("OnePlus Nord CE 3", 24999));

}

public void search(String query) {

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

boolean found = false;

for (Product p : products) {

if (p.name.toLowerCase().contains(query.toLowerCase())) {

p.show();

found = true;

}

}

if (!found) {

System.***out***.println("No products");

}

}

}

import java.util.Scanner;

public class Producttest {

public static void main(String[] args) {

ShowProduct catalog = new ShowProduct();

Scanner scanner = new Scanner(System.***in***);

System.***out***.println("Welcome to Shopping. What do you like to look for?");

String searchTerm = scanner.nextLine();

catalog.search(searchTerm);

}

}

**OUTPUT SCREENSHOT:**

