

LAB-6

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Sec-E

BSCS(II)

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Exercise of Lab: 6

class Product {

private String name;

private int quantity;

private double price;

Product(String name, int quantity, double price) {

this.name = name;

this.quantity = quantity;

this.price = price;

}

public String getName() {

return name;

}

public int getQuantity() {

return quantity;

}

public double getPrice() {

return price;

}

}

class Store {

private String name;

private String location;

private Product[] productlist;

private int nbProduct;

Store(String name, String location) {

this.name = name;

this.location = location;

this.productlist = new Product[100];

this.nbProduct = 0;

}

public String getName() {

return name;

}

public Product[] getproductlist(){

return productlist;

}

public void addProduct(Product product) {

if (nbProduct < 100) {

productlist[nbProduct++] = product;

}

else System.out.println("Eroor : no more space ");

}

public boolean searchProduct(String ProductName) {

for (int i = 0; i < nbProduct; i++) {

if (productlist[i].getName().equals(ProductName))

return true;

}

return false;

}

public Product deleteProduct(String ProductName) {

for (int i = 0; i < nbProduct; i++) {

if (productlist[i].getName().equals(ProductName)) {

Product deleted = productlist[i];

for (int j = i; j < nbProduct - 1; j++) {

productlist[j] = productlist[j + 1];

}

nbProduct--;

productlist[nbProduct] = null; // Clear the last reference

return deleted;

}

}

return null;

}

public void displayAll() {

System.out.println("Products in Store " + this.getName() + ":");

for (Product temp : productlist) {

if(temp !=null)

System.out.println("Product name : "+temp.getName()+" , product quantity : " +temp.getQuantity()+ " ,s Product PRICE : " + temp.getPrice() );

}

}

}

class Company {

private String name;

private Store[] arrayStore;

private int nbStore;

Company(String name) {

this.name = name;

this.arrayStore = new Store[10];

this.nbStore = 0;

}

public void addStore(Store store) {

if (nbStore < 10) {

arrayStore[nbStore++] = store;

}

}

public int searchNbofStore(String ProductName) {

int count = 0;

for (int i = 0; i < nbStore; i++) {

if (arrayStore[i].searchProduct(ProductName)) {

count++;

}

}

return count;

}

public void displayAll(){

System.out.println("Stores in company " + name + ":");

for (int i = 0; i < nbStore; i++) {

System.out.println(arrayStore[i].getName());

}

}

}

public class TestCompany1 {

public static void main(String[] args) {

Product p1 = new Product("TV", 4, 34000);

Product p2 = new Product("Bicycle", 4, 5500);

Product p3 = new Product("Oven", 3, 70000);

Store s1 = new Store("Makro", "Karachi");

Store s2 = new Store("Hypermart", "Karachi");

s1.addProduct(p1);

s1.addProduct(p2);

s1.addProduct(p3);

s1.displayAll();

Product tempProduct = s1.deleteProduct("Bicycle");

if (tempProduct != null)

System.out.println("Product " + tempProduct.getName() + " is deleted");

else

System.out.println("There is no product to delete");

s1.displayAll();

s2.addProduct(p1);

s2.addProduct(p2);

s2.addProduct(p3);

s2.displayAll();

Company c1 = new Company("Unilever");

c1.addStore(s1);

c1.addStore(s2);

c1.displayAll();

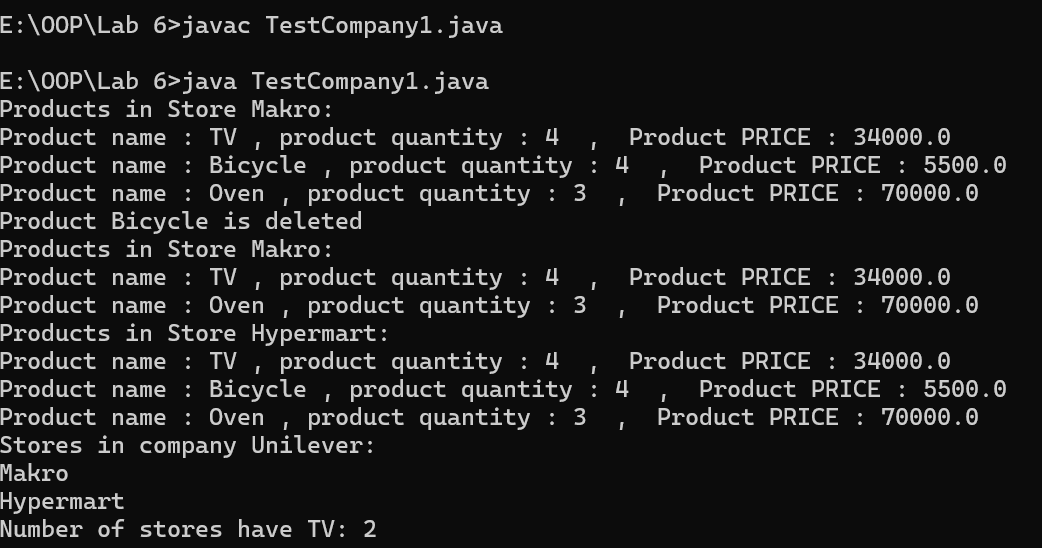
int n = c1.searchNbofStore("TV");

System.out.println("Number of stores have TV: " + n);

}

}

**OUT\_PUT**

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