

// Exercise 1: Employee Data Management

```
public class Employee {  
    int employeeId;  
    static String companyName;  
    public static void main(String[] args) {  
        Employee emp1 = new Employee();  
        Employee emp2 = new Employee();  
        emp1.employeeId = emp2.employeeId + 10;  
        Employee.companyName = "TechCorp";  
        emp2.employeeId = emp1.employeeId + 30;  
        System.out.println("After modification:");  
        System.out.println("emp1.employeeId: " + emp1.employeeId);  
        System.out.println("emp2.employeeId: " + emp2.employeeId);  
        System.out.println("Using emp1: " + emp1.companyName);  
        System.out.println("Using emp2: " + emp2.companyName);  
        System.out.println("Using Employee: " + Employee.companyName);  
        emp1.companyName = "InnovateTech";  
        System.out.println("\nAfter modifying static variable using emp1:");  
        System.out.println("emp1.companyName: " + emp1.companyName);  
        System.out.println("emp2.companyName: " + emp2.companyName);  
        System.out.println("Employee.companyName: " + Employee.companyName);  
    }  
}
```

// Exercise 2: Student Enrollment Details

```
public class Student {  
    int studentId;  
    static String schoolName;  
    public static void main(String[] args) {  
        Student student1 = new Student();  
        Student student2 = new Student();  
    }  
}
```

```

student1.studentId = student2.studentId + 5;
Student.schoolName = "Central High";
student2.studentId = student1.studentId + 20;
System.out.println("After modification:");
System.out.println("student1.studentId: " + student1.studentId);
System.out.println("student2.studentId: " + student2.studentId);
System.out.println("Using student1: " + student1.schoolName);
System.out.println("Using student2: " + student2.schoolName);
System.out.println("Using Student: " + Student.schoolName);
student1.schoolName = "Northview Academy";
System.out.println("\nAfter modifying static variable using student1:");
System.out.println("student1.schoolName: " + student1.schoolName);
System.out.println("student2.schoolName: " + student2.schoolName);
System.out.println("Student.schoolName: " + Student.schoolName);
}
}

```

// Exercise 3: Bank Account Management

```

public class BankAccount {
    double accountBalance;
    static String bankName;
    public static void main(String[] args) {
        BankAccount account1 = new BankAccount();
        BankAccount account2 = new BankAccount();
        account1.accountBalance = account2.accountBalance + 150.0;
        BankAccount.bankName = "Global Bank";
        account2.accountBalance = account1.accountBalance + 300.0;
        System.out.println("After modification:");
        System.out.println("account1.accountBalance: " + account1.accountBalance);
        System.out.println("account2.accountBalance: " + account2.accountBalance);
        System.out.println("Using account1: " + account1.bankName);
    }
}

```

```

        System.out.println("Using account2: " + account2.bankName);
        System.out.println("Using BankAccount: " + BankAccount.bankName);
        account2.bankName = "First National Bank";
        System.out.println("\nAfter modifying static variable using account2:");
        System.out.println("account1.bankName: " + account1.bankName);
        System.out.println("account2.bankName: " + account2.bankName);
        System.out.println("BankAccount.bankName: " + BankAccount.bankName);
    }
}

```

// Exercise 4: Product Pricing Update

```

public class Product {
    float price;
    static String storeName;
    public static void main(String[] args) {
        Product prod1 = new Product();
        Product prod2 = new Product();
        prod1.price = prod2.price + 25.0f;
        Product.storeName = "SuperMart";
        prod2.price = prod1.price + 75.0f;
        System.out.println("After modification:");
        System.out.println("prod1.price: " + prod1.price);
        System.out.println("prod2.price: " + prod2.price);
        System.out.println("Using prod1: " + prod1.storeName);
        System.out.println("Using prod2: " + prod2.storeName);
        System.out.println("Using Product: " + Product.storeName);
        prod1.storeName = "MegaStore";
        System.out.println("\nAfter modifying static variable using prod1:");
        System.out.println("prod1.storeName: " + prod1.storeName);
        System.out.println("prod2.storeName: " + prod2.storeName);
        System.out.println("Product.storeName: " + Product.storeName);
    }
}

```

```
}  
}
```

// Exercise 5: Car Mileage and Manufacturer

```
public class Car {  
    int mileage;  
    static String manufacturer;  
    public static void main(String[] args) {  
        Car car1 = new Car();  
        Car car2 = new Car();  
        car1.mileage = car2.mileage + 50;  
        Car.manufacturer = "AutoMaker Inc.";  
        car2.mileage = car1.mileage + 100;  
        System.out.println("After modification:");  
        System.out.println("car1.mileage: " + car1.mileage);  
        System.out.println("car2.mileage: " + car2.mileage);  
        System.out.println("Using car1: " + car1.manufacturer);  
        System.out.println("Using car2: " + car2.manufacturer);  
        System.out.println("Using Car: " + Car.manufacturer);  
        car2.manufacturer = "Speedster Co.";  
        System.out.println("\nAfter modifying static variable using car2:");  
        System.out.println("car1.manufacturer: " + car1.manufacturer);  
        System.out.println("car2.manufacturer: " + car2.manufacturer);  
        System.out.println("Car.manufacturer: " + Car.manufacturer);  
    }  
}
```