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COSC 117 Classes Homework Report

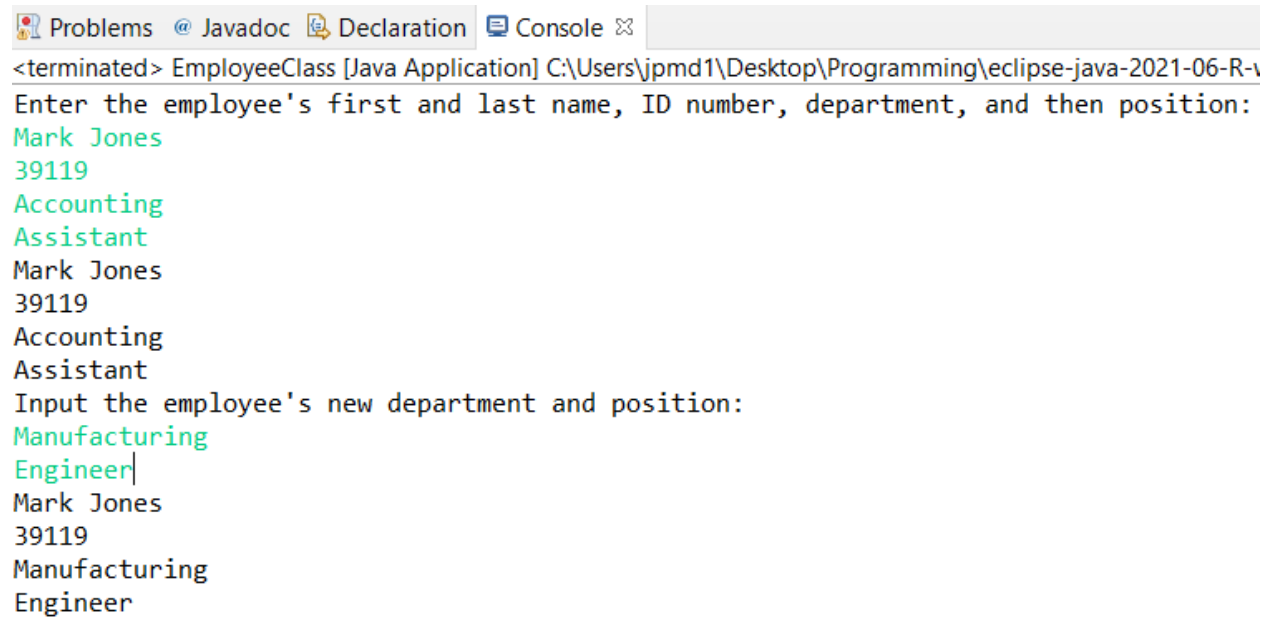# Example 1: Employee Class

1. Source Code:

```java
import java.util.Scanner;

public class EmployeeClass {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner keyboard = new Scanner (System.in);
        Employee employee1 = new Employee();

        System.out.println("Enter the employee's first and last name, ID number, department, and then position: ");
        employee1.setName(keyboard.nextLine());
        employee1.setID(keyboard.nextInt());
        employee1.setDepartment(keyboard.next());
        employee1.setPosition(keyboard.next());

        System.out.println(employee1.getName());
        System.out.println(employee1.getID());
        System.out.println(employee1.getDepartment());
        System.out.println(employee1.getPosition());

        System.out.println("Input the employee's new department and position: ");
        employee1.setDepartment(keyboard.next());
        employee1.setPosition(keyboard.next());

        System.out.println(employee1.getName());
        System.out.println(employee1.getID());
        System.out.println(employee1.getDepartment());
        System.out.println(employee1.getPosition());
    }

}
```

```java
public class Employee {
    private String name;
    private int idNumber;
    private String department;
    private String position;

    public void setName(String yourName) {
        name = yourName;
    }
    public void setID(int yourID) {
        idNumber = yourID;
    }
    public void setDepartment(String yourDept) {
        department = yourDept;
    }
    public void setPosition(String yourPos) {
        position = yourPos;
    }
    public String getName() {
        return name;
    }
    public int getID() {
        return idNumber;
    }
    public String getDepartment() {
        return department;
    }
    public String getPosition() {
        return position;
    }
}
```

2. Output:

\<terminated\> EmployeeClass [Java Application] C:\Users\jpmd1\Desktop\Programming\eclipse-java-2021-06-R-v

```
Enter the employee's first and last name, ID number, department, and then position:
Mark Jones
39119
Accounting
Assistant
Mark Jones
39119
Accounting
Assistant
Input the employee's new department and position:
Manufacturing
Engineer
Mark Jones
39119
Manufacturing
Engineer
```
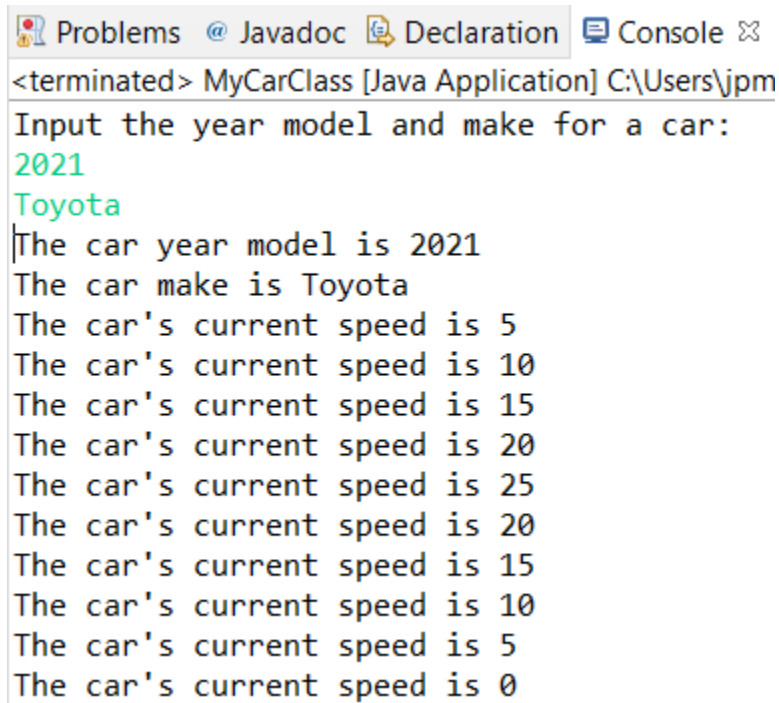
Example 2: Car Class

1. Source Code:

```
MyCarClass.java ⊠   Car.java   CarClass.java   Car.java
 1 import java.util.Scanner;
 2
 3 public class MyCarClass {
 4
 5⊖     public static void main(String[] args) {
 6         // TODO Auto-generated method stub
 7         Scanner keyboard = new Scanner (System.in);
 8
 9         int yearModel;
10         String make;
11
12         System.out.println("Input the year model and make for a car: ");
13         yearModel = keyboard.nextInt();
14         make = keyboard.next();
15
16         Car myCar = new Car(yearModel, make);
17         System.out.println("The car year model is " + myCar.getYearModel());
18         System.out.println("The car make is " + myCar.getMake());
19
20         for (int i = 0; i < 5; i++) {
21             myCar.Accelerate();
22             System.out.println("The car's current speed is " + myCar.getSpeed());
23
24         }
25         for (int i = 0; i < 5; i++) {
26             myCar.Brake();
27             System.out.println("The car's current speed is " + myCar.getSpeed());
28
29         }
30     }
31 }
```

```
MyCarClass.java     Car.java ⊠   CarClass.java   Car.
 1
 2 public class Car {
 3     private int yearModel;
 4     private String make;
 5     private int speed;
 6
 7⊖    public Car (int year, String carMake) {
 8         yearModel = year;
 9         make = carMake;
10         speed = 0;
11     }
12⊖    public int getYearModel() {
13         return yearModel;
14     }
15⊖    public String getMake() {
16         return make;
17     }
18⊖    public int getSpeed() {
19         return speed;
20     }
21⊖    public void Accelerate() {
22         speed += 5;
23     }
24⊖    public void Brake() {
25         speed -= 5;
26     }
27 }
```

2. Output:

```
Problems  @ Javadoc  Declaration  Console ⌖
<terminated> MyCarClass [Java Application] C:\Users\jpm
Input the year model and make for a car:
2021
Toyota
The car year model is 2021
The car make is Toyota
The car's current speed is 5
The car's current speed is 10
The car's current speed is 15
The car's current speed is 20
The car's current speed is 25
The car's current speed is 20
The car's current speed is 15
The car's current speed is 10
The car's current speed is 5
The car's current speed is 0
```