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| **Kingdom of Saudi Arabia**  **Ministry of Education**  **Najran University**  **College of Computer Science and Information Systems** |  | **المملكة العربية السعودية**  **وزارة التعليم**  **جامعة نجران**  **كلية علوم الحاسب ونظم المعلومات** |

Homework2: Think of anything that can be described in our life such as

(Animal, Cars, Smart Phones, Buildings…etc).

It should have many states(variables), and behaviors(methods)

-Write a complete Java Code that represent the states and behaviors and apply the following: - Create at least two Objects. (1 point)

- Invoke at least two different variables and two different methods using all of the objects that you created.(1 point)

- Use different Modifiers such as static, public, private.(1 point)

Answer Above:

**package** cars.train;

**public** **class** Car {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

MotorOfCars motor = **new** MotorOfCars();

motor.make = "BMW 55555";

motor.color = "RED";

System.***out***.println("Calling showAtts...");

motor.showAtts();

System.***out***.println("\*\*\*\*\*\*\*\*\*");

System.***out***.println("Starting Engine...");

motor.startEngine();

System.***out***.println("\*\*\*\*\*\*\*\*\*");

System.***out***.println("Calling ShowAtts...");

motor.showAtts();

System.***out***.println("\*\*\*\*\*\*\*\*\*");

System.***out***.println("Starting Engine...");

motor.startEngine();

}

}

**class** MotorOfCars{

String make;

String color;

**boolean** engineState;

**void** startEngine() {

**if** (engineState == **true**)

System.***out***.println("The engine is already on.");

**else** {

engineState = **true**;

System.***out***.println("The engine is now on.");

}

}

**public** **void** showAtts() {

System.***out***.println("This MotorCars is a "

+ color + " " + make);

**if** (engineState == **true**)

System.***out***.println("The engine is on.");

**else** System.***out***.println("The engine is off.");

}

**private** **void** showColor() {

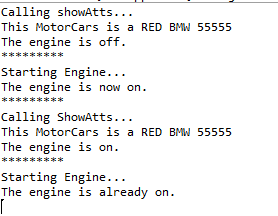
System.***out***.println("This MotorCars is a color"

+ color);

}

}

OutPut



- UML Diagram that represent your class.(1point) - Comments shows the most important lines of your code.(1 point)

