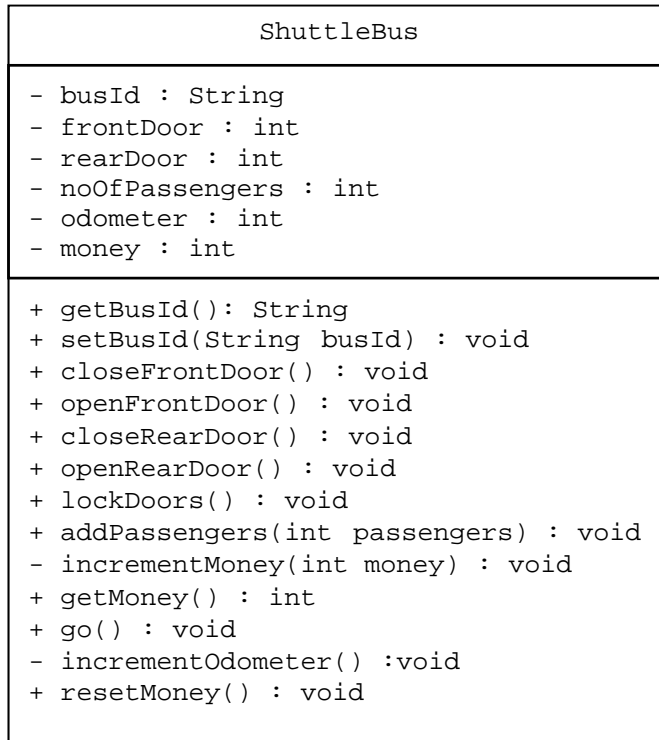
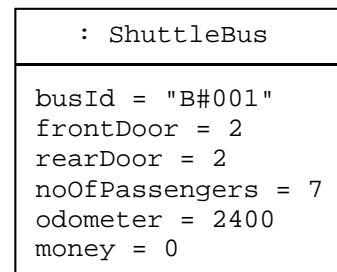


1. Given the following class diagram and an object diagram, follow the instruction below.

Class Diagram



Object Diagram



1.1) Write a java class according to the above class diagram (on the left side) and the following requirements.

(1) The value of frontDoor and rearDoor has the following meaning:

- 0 stands for opened
- 1 stands for closed
- 2 stands for locked

(2) The lockDoors() method must lock all doors.

(3) The noOfPassengers is increased by calling the addPassengers(int passengers) method. When the addPassengers(int passengers) method is called, the money must added by calling the incrementMoney(int money) method as well and the added amount must be the number of added passengers × 7 baht.

(4) Each time that the go() method is called, the odometer must be increased by calling the incrementOdometer() method and the increase amount is must be 800 meters.

(5) The resetMoney() method reset money to 0.

(6) The ShuttleBus class must have the following constructors.

- ShuttleBus() // default constructor
- ShuttleBus(String busId)
- ShuttleBus(String busId, int odometer)
- ShuttleBus(String busId, int odometer, int money)

1.2) Write a driver class to create a ShuttleBus object using the default constructor, then call the methods in the ShuttleBus class so that this object changes its state to the state given in the object diagram above.