

Assignment #1

First Java Programs

Task 1.

Using a text editor write a class MyCar that confirms to the following specification:

1. The constructor of a MyCar object defines its
 - tank capacity (limits: from 20 to 80 liters, default value 40)
 - mileage from (limits 3 to 20 liters per 100 kilometers, default value 5).
2. The following methods are necessary:
 - boolean tankIt(double howMuch): the capacity of the tank can not be exceeded)
 - boolean makeTrip(double distance): there must be enough fuel in the tank to cover the distance.
 - double getTotalDistance();
 - double getLastTripDistance();
 - double getFuelLevel();

Using the Eclipse IDE:

1. Implement a method void testMe() to verify all of above methods.
2. Use the Eclipse debugger to run the testMe() method.
3. Make sure that no improper action is accepted.
4. Run the class file
5. Create a jar file
6. Run the jar file.

Task 2.

Write a program that accepts the following commands from the standard input:

1. tank X // tank X liters of gas
2. trip X // make a trip, x is its distance
3. total distance // show the total distance covered by the car
4. total fuel // show the total fuel consumption.

Remarks:

- The above program should be used to test the MyCar class.
- The program should reject improper arguments.

Run the above program both from the Eclipse environment and from the command line .

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