

Write a Car class called **Car** and client program called **AP1ch07prg02Test** :

Requirements for a “**C**” (maximum 23 out of 30 points)

- A) Create a class called Car that will do the following
  - 1) Have two constructors
    - a) A non-default constructor that
      - (1) stores a passed string parameter of the car’s name like “mustang”
      - (2) keeps track of how many car objects have been created
  - 2) Have two methods
    - a) A method that returns the name of the car  
Answer: Should this method have a static modifier? (yes/no) (2 pts) 2a) \_\_\_\_\_
    - b) A static (class) method that returns the number of car objects created
  - 3) Have two instance field variables one of which is a static (class) variable
- B) Create a client program that:
  - 1) Creates 4 Car object references with their data:
    - a) car1 with a name of “mustang“
    - b) car2 with a name of “charger“
    - c) car3 with a name of “corvette“
    - d) car4 with your favorite car name
  - 2) Calls a method four times that returns the name of the car then outputs the name in the client code.
  - 3) Calls a method that returns the number of car objects created and outputs the number in the client code.

Requirements for a “**B**” (maximum 26 out of 30 points)

- Same as above and have a default constructor that
  - 1) stores your favorite car’s name
  - 2) also keeps track of how many car objects have been created

Requirements for an “**A**” (maximum 30 out of 30 points)

- Same as all of the above and do:
  - Capitalize the first letter of the car name after it is returned with the lower case letter i.e. mustang is returned but the output is Mustang.

**Output should look like:**

Car One is a Mustang (Note: car names only capitalized in “A” programs)  
 Car Two is a Charger  
 Car Three is a Corvette  
 Car Four is a *default name* (Note: this line not in “C” programs)

There are 4 cars

When perfect, show your teacher the coding and output (run).

\_\_\_\_\_  
(teacher signature)