

## Chapter 9 – Car Class

Time required: 90 minutes

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

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### Pseudocode

1. Write pseudocode for the exercise
2. Save it in a document
3. Submit with the assignment

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### Minimum Requirements

A variable with one underscore in front of it is private to the class only.

Example: **self.\_variable**

1. Create a class file named **car.py**
  - a. **Attributes:**
    - i. **\_color**
    - ii. **\_speed**
  - b. Initialize the two attributes as parameters in the **\_\_init\_\_** method.
  - c. **Methods:**
    - i. **accelerate()** adds 5 to the speed attribute
    - ii. **brake()** subtracts 5 from the speed attribute
    - iii. **get\_speed()** returns the current speed
    - iv. **get\_color()** returns the color
2. Create a Python program named: **car\_go.py** that interactively demonstrates these methods and attributes as shown in the example run.

Example run:

```
What color is your car? Blue
The Blue car is going 50 mph.

(a)ccelerate or (b)rake: a
The Blue car is going 55 mph.

(a)ccelerate or (b)rake e(x)it: a
The Blue car is going 60 mph.

(a)ccelerate or (b)rake e(x)it: b
The Blue car is going 55 mph.

(a)ccelerate or (b)rake e(x)it: b
The Blue car is going 50 mph.

(a)ccelerate or (b)rake e(x)it: x
```

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## Assignment Submission

1. Attach the pseudocode.
2. Attach the program files.
3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.