

## General Points

- Use the course material located at:
  - [C# @ ACC](#)
- Program04 can be completed using content from the following chapters:
  - Welcome! through Classes and Objects
- Create a console application using Visual Studio named Program04.
- Output appropriate results. In other words, all requirements should be output and identified by number.

# Requirements

**Requirements (these are the requirements to identify by number):**

1. Output a header in the console: "This is Program04"
2. Within Program.cs, create a class named *Automobile* with the following:
  - a. Appropriate PDC and PDDC
  - b. Appropriate getters and setters
  - c. Methods to increase speed, decrease speed, and show speed
  - d. Instance members to track speed, make, model, and color

Using the Automobile class:

- a. Ask users how many Automobiles they would like to create
  - b. Request users to input make, model, and color (different property values for each automobile)
  - c. Allow users to change speed and report the new speed
3. Create a class named *Restaurant* in its own class file with the following:
    - a. Appropriate PDC and PDDC
    - b. Classic properties (see Triangle.cs) for:
      - i. City
      - ii. Chef

- iii. Cuisine Type
  - iv. AAA Diamond Rating (1-5)
  - c. Method to return all properties concatenated together into a user readable string
4. Create a class *Painting* in its own class file with the following:
- a. Appropriate PDC and PDDC
  - b. Auto-implemented properties for the following:
    - i. artist
    - ii. genre
    - iii. country
    - iv. year
    - v. wholesale price

Using the Painting class:

- a. Ask users how many Paintings they would like to create
  - b. Request users to input appropriate data for each painting
  - c. Method to calculate the Painting object retail price based on the following formula:
    - i.  $\text{retailPrice} = \text{wholesalePrice} + \text{commission} + \text{tax} + \text{duty};$
4. Output a thank you message: "Thank you for running Program04."
5. **Output a statement explaining your experiences with Program04. Make this authentic (minimum of 2-3 sentences).**

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**TEST – TEST – TEST** your application to ensure it meets requirements.

- Use the list above and the common requirements as a checklist.
- Not meeting all requirements = 0 points for the assignment.