CIS 605 - Assignment Set 1
Due: Sunday, September 1 @ 11:59 PM

Develop the projects described below using good visual design and program coding practices that includes

- Professional Appearance (Layout, placement, spelling, formatting)
- Meaningful title on title bar of form(s)
- Identifiers (names) for objects, variables, and constants are meaningful and follow a consistent naming convention
- General remarks at the start of every class in your program including Class Name, Class Description, Developer Name, Date Created, Date Last Modified
- Descriptive remarks for every method
- Proper indentation & blank line after each full comment line
- All variables and constants are local whenever possible (scope)
- Modular programming – i.e., breaking down a "large" programming task into multiple, independent modules, with each module performing one part of the required functionality.

Program 1

Create a static class (MyFavorites) that has

- 3 static methods – each method should return a favorite quote, song, activity, place, food, hobby, movie, place, and so on. For example, you could have a DisplayFavoriteSport method that returns your favorite sport.

Create a Form class that has the following controls and event procedures:

1. A label at the top of the form that displays your first name (e.g., "Jane's Favorites")
2. A label to display the value returned by the methods (see 5 below)
3. Three buttons with their Text properties set to appropriate labels (e.g., "Sport")
4. One button, labeled "Exit"
5. The click event procedures for the first three buttons should call the appropriate method (in the static class) and display the result in a label (see 2 above)
6. The click event for the Exit button should close the form
7. A label at the bottom of the form that displays your full name as the developer

Program 2

Create a static class (Cone) that has

- 2 static methods
    - CalculateArea (that has radius and height as input parameters and returns the surface area of the cone)
    - CalculateVolume (that has radius and height as input parameters and returns the volume of the cone)

  Formulas for the calculations:

  Area = $\pi * radius * (radius + \sqrt{radius^2 + height^2})$

  Volume = $\frac{1}{3} * \pi * radius^2 * height$

  Please Note:

  - Use Math.PI and Math.Pow of the Math class
    e.g., Area = *Math.PI * radius * (radius + Math.Sqrt(Math.Pow(radius,2) + Math.Pow(height,2)))*
  - The input parameters (i.e., radius, height) for the two methods should be of type Integer
  - The returned values for the two methods should be of type Double

Create a Form class that has the following controls and event procedures:

1. One text box to input the radius
2. One text box to input the height
3. A label to display the result (see 5 below)
4. Three buttons labeled "Area", "Volume" and "Exit".
5. The click event procedures for the first two buttons should call the appropriate method (in the static class) and display the result in a label (see 2 above).
6. The click event for the Exit button should close the form
7. A label at the bottom of the form that displays your name as the developer