

ITSE 1330 – C# Program 5

- Use the course material located at:
 - <http://www.austincode.com/itse1330/>
- Program 5 can be completed using content from the following chapters:
 - 00-Welcome! through 12-Static and Parameters

Requirements (remember to identify the requirements by number):

- Create a console application using Visual Studio.
 - Name the Solution and Project Program-5.
 - Output appropriate communication messages to the user.
 - Output appropriate results. In other words, all requirements should be output and identified by number.
1. Output a header in the console: “This is Program-5”
 2. Create three instance fields in Program.cs: lowPSISetting, highPSISetting, and desiredPSI.
 3. Create a local method in Program.cs named ChangeAirPressure(). See SayHello() in Chapter 12-Static and Parameters for an analogy.
 4. ChangeAirPressure() specifics:
 - a. Call ChangeAirPressure() such that lowPSISetting can be changed by the method but highPSISetting cannot. Include the parameter desiredPSI that can be changed by the method but does not have to be set before the call.
 - b. Ask user to enter desiredPSI.
 - c. Check that desiredPSI is within the range between lowPSISetting and highPSISetting.
 - d. Report status of the range check back to the user.
 - e. Ask user if s/he would like to change lowPSISetting, if so, change it and check again to determine if desiredPSI is within the range.
 5. Back in Program.cs, show the effect of on lowPSISetting, highPSISetting, and desiredPSI before and after the call to ChangeAirPressure().
 6. Create a class named Alarm with the following:
 - f. Contains no constructors

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- g. Member to record how many times the alarm is sounded.
 - h. Method SoundAlarm() which outputs red, white, and blue messages to the console that the alarm has been sounded.
 - i. Method GetAlarmCount() to return the alarm count.
7. Back in Program.cs, ask the user if they would like to sound the alarm, if so, sound the alarm. Continue to ask and sound the alarm until the user enters: NO .
8. Output a thank you message: “Thank you for running Program-5.”

TEST – TEST – TEST your application to ensure the specific program requirements are met.

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



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