C# Programming Homework Homework 05

Chapter 05, C# Step by Step

# Readings

Read chapter 5 in the *C# Step by Step* book.

# Discussion Questions

Answer the discussion questions in writing.

1. What is a *compound assignment operator?* How does it work?
   * Used to shorted code, works the same as if they were split.
2. List all the compound assignment operators.
   * \*=, /=, %=, +=,-=
3. List two ways to increment a numeric variable by 5. List two ways to decrement a numeric variable by 50.
   * Count += 1;
   * Count++;
4. How long does a *while* loop run?
   * As long as it is true
5. What is an *iteration variable*? (Not in book)
   * Before each loop end it will produce a value.
6. What happens if you don’t change the loop variable in the body of the while loop block?
   * It will repeat forever.
7. How many parts does a *for* loop statement have? Can you omit any of them? Can you omit all of them? What happens if you omit all of them?
   * It has three parts the initialization, Boolean expression, the code that updates the control variable
   * You can omit each part to get a different result or error. P-122/123
8. How do you guarantee that a loop runs at least once?
   * Use the Do statement
9. What does the *break* statement do?
   * Used to jump out of the body of an iteration.
10. What does the *continue* statement do?
    * Is caused to preform the next iteration in the loop.
11. (Thought question) Can you think of any reason why you would want to have an infinite loop? An “infinite loop” is a loop without an update variable that in effect runs forever. As you will see, these kinds of loops are written intentionally to perform various kinds of tasks.
    * embedded control code