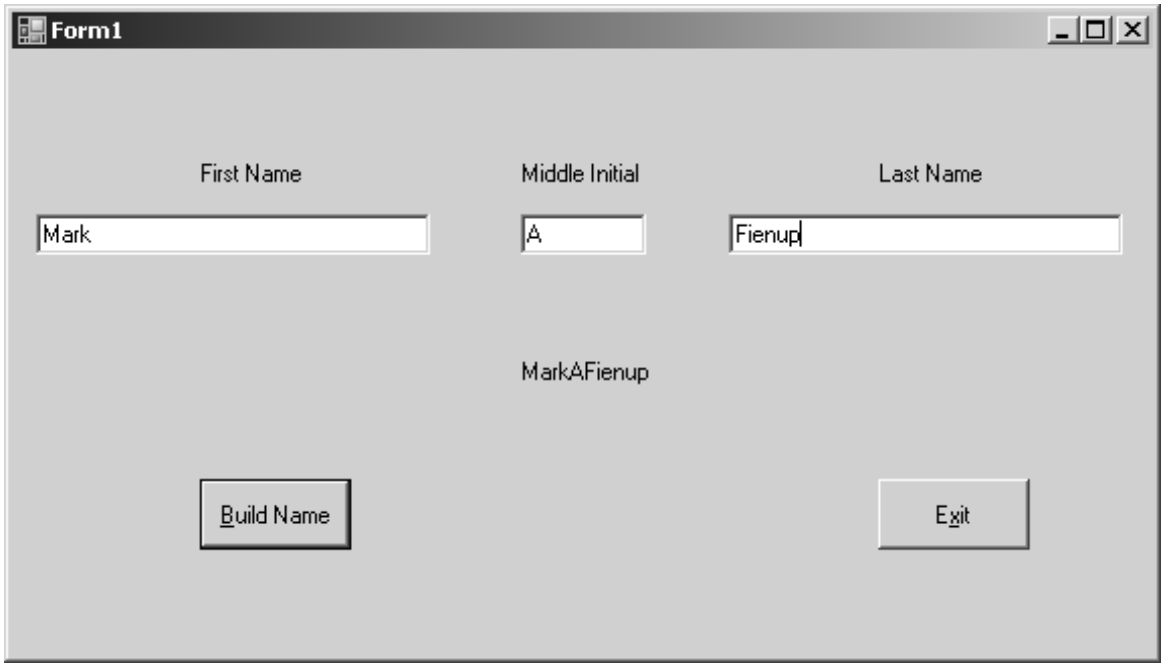
Name:_____

1) The code btnBuildName.Click is not quite right since it does not put spaces between the parts of the name. How would you fix the code?

```
Private Sub btnBuildName_Click(ByVal sender As System.Object, _
                                ByVal e As System.EventArgs) Handles btnBuildName.Click

    lblFullName.Text = txtFirstName.Text  &     txtMiddleInitial.Text  &     txtLastName.Text

    lblFullName.Visible = True
End Sub
```



2) A *variable* is a named spot in memory that the programmer can use to store a value. In VB, variables must be *declared* explicitly by the programmer and causes the variable to be created. The format/syntax of a variable declaration (called a *Dimension statement*) is:

Dim variableName As DataType

where Dim and As are keywords, the variableName is a meaningful name chosen by the programmer (rules: 1st char. is letter or '_', and the rest can be letters, '_', or digits), and DataType is a VB data type:

- an integer type: Byte, Short, Integer, Long
- a floating-point (real type): Single, Double, Decimal
- some other common data types: Boolean, Char, String, Date

In the above btnBuildName.Click code, suppose we wanted to declare a string variable in which to store the full name before we displayed it.

a) What would be meaningful variable name?

b) What would the Dimension statement look like for this variable?

c) Write the assignment statements to build the string and then assign it to lblFullName.Text.

Name:_____

3) Given the operator precedence for VB's mathematical and logical operations is (from highest to lowest):

- Operations that are enclosed in parentheses.
- Exponentiation (^) and NOT
- Unary negation (-) and AND
- Multiplication (*), floating point division (/), and OR
- Integer division (\)
- Modulus remainder (Mod)
- Addition (+) and subtraction (-)
- String concatenation (&)
- Relational operators (=, <, >, <=, >=, !=)

Operators within each level are performed left-to-right. Evaluate each of the following:

a) 6 + 3 * 5

b) (6 + 2) \ 3

c) 4 + 2 ^ 3 - 5

d) 7 Mod 4 + 5 * 6

e) (6 + 2) / 3

Homework #1
Due: January 30, 2009 (Friday at 5 PM)
Chapter 2 Programming Challenge 3. Math Tutor Application