

Starting Out with Visual C#, 5e (Tony Gaddis)

Chapter 2 Introduction to Visual C#

TRUE/FALSE

1. A control's *Visible* property cannot be modified in code.

ANS: F

2. When you use the *Properties* window to change a control's *Visible* property at design time, the control will become invisible in the *Designer*.

ANS: F

3. When a method executes, the statements in the method always execute in the order that they appear, from the beginning of the method to the end.

ANS: T

4. Comments are short notes intended for the compiler to read and interpret.

ANS: F

5. If you double-click an error message in the *Error List* window, the code editor will highlight and display the line of code that caused the error.

ANS: T

6. The appearance and other characteristics of a GUI object are determined by the object's properties.

ANS: T

7. Changing a form's *Text* property will change the form's name.

ANS: F

8. When you create *Button* controls, they are automatically given default names such as `button1`, `button2`, and so forth.

ANS: T

9. A control's name should reflect the purpose of the control.

ANS: T

10. C# identifiers can contain spaces after the first character.

ANS: F

11. The only way to run a program in Visual Studio is to click the *Start Debugging* button on the toolbar.

ANS: F

12. C# source code files always end with the `.cs` extension.

ANS: T

13. It is important that you do not modify the contents of the `Form1.cs` file because doing so will prevent the application from executing.

ANS: F

14. Each opening brace (`{`) of a code container must have a matching closing brace (`}`) later in the program.

ANS: T

15. When an event handler is generated for a control by Visual Studio, it doesn't do anything until you add your own code.

ANS: T

16. Ending a programming statement with a semicolon is not required in C#.

ANS: F

17. In C# string literals can be enclosed in double quotes, single quotes, or a combination.

ANS: F

18. In a C# application, all buttons on a form must share the same Click event handler in the form's source code file.

ANS: F

19. A Label control's Text property is initially set to the same value as the Label control's name.

ANS: T

20. The assignment operator assigns the value that appears on its left side to the item that appears on its right side.

ANS: F

MULTIPLE CHOICE

1. Which of the following is **not** a legal C# identifier?
 - a. `_calculateTotalButton`
 - b. `printSalesReportButton`
 - c. `clear_all_the_customer_names_button`
 - d. `1stPlayerStartButton`

ANS: D

2. Which of the following Button control names is a legal C# identifier?

- a. `_DisplayOption5Button`
- b. `Exit!Button`
- c. `*Clear*Button*`
- d. `delete Record Button`

ANS: A

3. The _____ shows a description of an error, the name of the source code file containing the error, the error's line number and column number, and the name of the project.
- a. *Debug* dialog box
 - b. *Crash* pop-up
 - c. *Error List* window
 - d. *Just In Time* debugger

ANS: C

4. To close an application's form in code, use the _____ statement.
- a. `me.Quit();`
 - b. `this.Close();`
 - c. `form.Exit();`
 - d. `app.Stop();`

ANS: B

5. When you enter a statement into the code editor, Visual Studio analyzes it and, if a syntax error is found, it is _____.
- a. automatically corrected
 - b. underlined with a jagged line
 - c. crossed out
 - d. highlighted

ANS: B

6. The _____ file contains an application's start-up code which executes when the application runs.
- a. `Main.cs`
 - b. `Code.cs`
 - c. `Program.cs`
 - d. `Source.cs`

ANS: C

7. A _____ is a declared block in a program between braces (`{ . . . }`) that holds classes.
- a. method
 - b. program
 - c. namespace
 - d. list

ANS: C

8. A(n) _____ is a logical container in a program that holds methods and other program elements.
- a. event
 - b. program
 - c. queue
 - d. class

ANS: D

9. The _____ directives that appear at the top of a C# source code file indicate which namespaces the program will use.
- a. `include`
 - b. `namespace`
 - c. `public`
 - d. `using`

ANS: D

10. If you want your code to execute a method, write a statement known as a(n) _____.
- a. event handler
 - b. executor statement
 - c. initialization routine
 - d. method call

ANS: D

11. Which of the following statements correctly displays the text `Hello` in a message box?
- a. `MessageBox("Hello")`
 - b. `MessageBox.Show("Hello");`
 - c. `msgBox(Hello);`
 - d. `msgBox.show(Hello)`

ANS: B

12. The file named _____ contains code associated with a form named `Form1`.
- a. `Form1.cs`
 - b. `MainForm.cs`
 - c. `Control.cs`
 - d. `Window.cs`

ANS: A

13. When you select an object in the Visual Studio *Designer*, the object's size, color, text, and other characteristics are displayed in the _____ window.
- a. *Designer*
 - b. *Editing*
 - c. *Object*
 - d. *Properties*

ANS: D

14. The Visual Studio _____ window shows a scrollable list of controls that you can add to a form.
- a. *Collection*
 - b. *Bank*
 - c. *Toolbox*
 - d. *Shelf*

ANS: C

15. When a piece of data such as `23` or `Hello` is written into a program's code, it is called a _____.
- a. constant
 - b. sentinel
 - c. value
 - d. literal

ANS: D

16. A(n) _____ is a sequence of one or more programming statements that perform some operation.
- a. algorithm
 - b. method
 - c. class
 - d. namespace

ANS: B

17. A(n) _____ is a method that executes when a specific event such as clicking the mouse takes place while an application is running.
- a. action sequencer
 - b. feature coordinator
 - c. event handler
 - d. incident manager

ANS: C

18. A(n) _____ event occurs on a control when the user clicks the mouse while an application is running.
- a. Action
 - b. Click
 - c. Live
 - d. Mouse

ANS: B

19. When you want to display text on a form but not allow the user to change the text, you use a _____ control.

- a. String
- b. Label
- c. Text
- d. Font

ANS: B

20. A _____ property can be set to one of two possible values: `true` or `false`.

- a. Boolean
- b. Binary
- c. Singular
- d. Toggle

ANS: A

21. In code you use a(n) _____ to store a value in a control's property.

- a. string literal
- b. assignment statement
- c. dialog box
- d. constant

ANS: B

22. When a(n) _____ appears around an object in the Visual Studio *Designer*, it indicates that the object is selected and ready for editing.

- a. sizing handle
- b. editing icon
- c. bounding box
- d. frame

ANS: C

23. _____ allow you to resize a selected object in the Visual Studio *Designer* by clicking and dragging the mouse when the mouse cursor becomes a two-headed arrow.

- a. Bounding boxes
- b. Sizing handles
- c. ToolTips
- d. Properties

ANS: B

24. Which of the following statements would display the number 25 in a Label control named `outputLabel`?

- a. `outputLabel.Text = 25;`
- b. `outputLabel.Text = "25";`
- c. `outputLabel(25);`
- d. `outputLabel = "25";`

ANS: B

25. Which of the following statements would clear the text displayed in a Label control named `cityLabel`?

- a. `cityLabel.Text = "empty";`
- b. `cityLabel.Text = "none";`
- c. `cityLabel.Text = "clear";`
- d. `cityLabel = "";`

ANS: D

26. Assuming an application has a PictureBox control named `profilePictureBox`, which of the following assignment statements will hide the PictureBox from the user at runtime?

- a. `profilePictureBox.Visible = False;`

- b. `profilePictureBox.Visible = false;`
- c. `profilePictureBox.Visible = True;`
- d. `profilePictureBox.Visible = true;`

ANS: B

27. Once you have created a PictureBox control, you use its _____ property to specify the image it will display.
- a. Picture
 - b. Image
 - c. Source
 - d. Display

ANS: B

28. _____ is a term that refers to an image's width to height ratio.
- a. Area
 - b. Bounding box
 - c. Aspect ratio
 - d. UV map

ANS: C

29. _____ are short notes placed in a program's source code that explain how the program works.
- a. Sketches
 - b. Tags
 - c. Comments
 - d. Labels

ANS: C

30. A(n) _____ appears on one line in a program and begins with two forward slashes (`//`).
- a. line comment
 - b. short comment
 - c. block comment
 - d. documentation comment

ANS: A

31. Which of the following are used by professional programmers to embed extensive documentation in a program's source code?
- a. line comments
 - b. block comments
 - c. documentation comments
 - d. embedded comments

ANS: C

32. The _____ property can be used to change a form's width and height.
- a. Area
 - b. Resolution
 - c. Size
 - d. Rectangle

ANS: C

33. Selecting the _____ button in the *Properties* window causes the items in the window to be displayed in logical groups.
- a. Grouped
 - b. Categorized
 - c. Ordered
 - d. Type

ANS: B

34. In the design window, you can click and drag a control to a new location when the mouse cursor is positioned inside the control and becomes a _____.
- a. two-headed arrow
 - b. four-headed arrow
 - c. hand icon
 - d. scissor icon

ANS: B

35. To delete a control you can select it on a form and press the _____ key.
- a. Delete
 - b. Z
 - c. Tab
 - d. X

ANS: A

36. A control's _____ property identifies the control in the application's code and in the Visual Studio environment.
- a. Text
 - b. Source
 - c. Tag
 - d. Name

ANS: D

37. Control names are also known as _____, the same term used for variables in programs.
- a. tags
 - b. identifiers
 - c. values
 - d. labels

ANS: B

38. A file that contains program code is called a _____.
- a. source code file
 - b. program file
 - c. C# file
 - d. cs file

ANS: A

39. Just as a period marks the end of a statement, a(n) _____ marks the end of a programming statement in C#.
- a. space
 - b. underscore
 - c. semicolon
 - d. dot

ANS: C

40. When you have a project open in Visual Studio, the time during which you build the GUI and write the application's code is referred to as _____.
- a. prototyping
 - b. design time
 - c. visual planning
 - d. application progression

ANS: B