Chapter 001 Introduction to Visual Basic 2010

True / False Questions

1. With Visual Basic, you can write computer programs that run in the Microsoft Windows environment.
True   False

2. Visual Basic is an object-oriented programming language.
True   False

3. In Form1.Text, the word Text is referring to a method.
True   False

4. Writing a program in Visual Basic is so easy that it is not necessary to do any planning.
True   False

5. When creating a project in Visual Basic, you should always begin by writing the Basic code.
True   False

6. A .vb file is a text file that can be opened with any text editor and it holds the code procedures that you write.
True   False

7. The .resx file is a text file that defines all resources used by the form including any graphics that are displayed on the form.
True   False

8. The Properties window is used to set the properties for the objects on your form.
True   False

9. The Solution Explorer window is used to design a form that makes up your user interface.
True   False

10. You are in run time when you design the user interface.
True   False

11. You write Visual Basic code statements during design time.
True   False

12. Snap lines are blue lines that assist the programmer in aligning controls.
True   False

13. You can use the Properties window to change the properties of controls during run time.
True   False

14. After you have added a label to a form, you can change the words that are displayed inside the button by changing the Text property.
True   False

15. If the programmer does not write code for a button control, Visual Basic automatically provides code in the Click procedure that will close the form when the user clicks the button.
True   False

16. Remark statements are not executable code.
True   False

17. Programmers should add comments to their code in order to make the program logic easier to understand.
True   False

18. Assignment statements work from left to right, assigning the value on the left side of the equal sign to the property named on the right side of the equal sign.
True   False

19. In order to properly save changes that have been made to a Visual Basic project, you should choose Save All from the File menu.
True   False

20. The Visual Studio IDE will automatically create a new folder for each new project.
True   False

21. If a project runs without a syntax error, you can be certain that the code has performed the project's task correctly.
True   False

Multiple Choice Questions

22. Microsoft Windows uses a GUI environment. GUI (pronounced "gooey") stands for
_____.
A. Geographical User Interchange
B. Graphical User Interface
C. Geometrical Upper Intelligence
D. Grammatical User Incorporation

23. Visual Basic is a(n) _____.
A. Procedural programming language
B. Object-oriented programming language
C. Hyperlink programming language
D. Sequential programming language

24. In Visual Basic, we work with objects that have _____.
A. Programmer preference
B. Projects, solutions, and procedures
C. Classes, actions, and disciplines
D. Properties, methods, and events

25. When you plan a Visual Basic program, you follow a three-step process that should end
with _____.
A. Setting the properties
B. Writing the Basic code
C. Coding all of the remark statements
D. Defining the user interface

26. After the steps for planning a Visual Basic project are competed, you can begin actually constructing a program by _____.
A. Setting the properties
B. Creating the interface
C. Writing the code
D. Executing the next step based on the programmer's preference

27. Which of the following shows the correct order for creating a Visual Basic program?
A. Set the properties, create the interface, write the code
B. Create the interface, set the properties, write the code
C. Create the interface, write the code, set the properties
D. Write the code, set the properties, create the interface

28. The _____ holds information about the solution and the projects it contains. This is the file that you open to work on or run your project.
A. project file
B. resource file
C. solution file
D. .vb file

29. Each Visual Basic project contains a text file that defines all resources used by the form. This file has a _____ extension.
A. Resx
B. Designer.vb
C. sln
D. vb

30. The Visual Studio environment contains many different windows. Which window will be the user interface when the project is running?
A. The Toolbox
B. The Solution window
C. The Properties window
D. The Form Designer window

31. Which window do you open if you want to see all of the objects that you can add to a form?
A. The Toolbox
B. The Solution window
C. The Properties window
D. The Form Designer

32. While you are creating the user interface, you are in _____.
A. stop time
B. debug time
C. run time
D. design time

33. If you encounter a run-time error or you pause the program execution, you are in _____.
A. stop time
B. debug time
C. pause time
D. design time

34. A project in Visual Basic contains _____.
A. form(s)
B. controls
C. code
D. all of these

35. Which of the following are coding conventions required by the textbook?
A. Remarks must be included in the Declarations section.
B. Every event procedure must include remarks.
C. All objects (except labels not referred to in code) must be given descriptive names.
D. All of these

36. If you have added a label to a form and you want to make sure that nothing is displayed in it when the program begins, you must delete the contents of the _____.
A. Text property
B. Alignment property
C. Name property
D. Form window

37. Where does the Text property for a form appear?
A. In the lower left corner of the form
B. In the form's title bar
C. In the center of the form
D. In the Toolbox

38. The property used to display information in the title bar of a form is _____.
A. TitleBar
B. Name
C. Text
D. Title

39. Remarks, or comments, that programmers add to their code in order to make the program more readable and understandable, _____.
A. are executable code
B. begin with an asterisk (*)
C. are not considered "executable"
D. display on the form when the program runs

40. If a line of code is not considered "executable", it must be _____.
A. a Close statement
B. an Assignment statement
C. a Remark statement
D. an event procedure

41. What is the code used to display the words "Visual Basic" in a label named TitleLabel?
A. TitleLabel.Name = "Visual Basic"
B. TitleLabel.Name.Visual Basic
C. TitleLabel.Text = "Visual Basic"
D. "Visual Basic" = TitleLabel.Text

42. Use the code, _____, to end a program.
A. Me.Exit
B. Me.Close
C. Me.End
D. Me.Stop

43. Which of the following choices CANNOT be used to start running a project?
A. Press and hold the CTRL key and then press the S key.
B. Open the Debug menu and choose Start Debugging.
C. Press the Start Debugging button on the toolbar.
D. Press F5.

44. When you create a new Visual Basic project and choose the disk location for your project, the VS IDE _____.
A. will create a folder and save all of the project files in the folder
B. will automatically save your project every 5 minutes
C. requires that the project file be stored on a hard drive
D. will create remarks in the Declarations section that list all of the files in the project

45. To print a form, add a _____ component to the component tray.
A. FormPrint
B. Print
C. PrintForm
D. PrintAll

46. Where does the text recommend that you code the programmer's name and remarks defining the purpose of a project?
A. In Visual Basic Help
B. In the event procedure for exiting the project
C. In the Declarations section at the top of the file
D. In the form's title bar

47. _____ if the code Me.Cloose is contained in a project.
A. VB will automatically fix the misspelling when the program is run
B. A logic error will occur
C. The mispelling will cause a syntax error to occur and Me.Cloose will have a blue squiggly line underneath
D. No error will occur

48. When you break VB's rules for punctuation, format, or spelling, you generate a(n) _____.
A. run-time error
B. logic error
C. syntax error
D. arithmetic error

49. If a project runs, but the results are not correct, this is called a(n) _____.
A. run-time error
B. logic error
C. syntax error
D. arithmetic error

50. Finding and fixing programming errors is called _____.
A. recoding
B. debugging
C. fix-its
D. tuning

51. Visual Basic provides AutoCorrect, which is a handy way to fix _____.
A. syntax errors
B. logic errors
C. arithmetic errors
D. all types of errors

52. With Visual Basic context-sensitive Help, you can view a Help topic by placing the insertion point in a word in the code window and pressing _____.
A. the Ctrl key and the H key
B. F1
C. F5
D. F8

Short Answer Questions

53. A form in a project needs a label, a text box, and a button. Explain how you will add the objects, set their properties, and reference the object in the basic code.

54. How do the Editor and IntelliSense help you write Visual Basic code?

Chapter 001 Introduction to Visual Basic 2010 Key

True / False Questions

1. *(p. 2)* With Visual Basic, you can write computer programs that run in the Microsoft Windows environment.
TRUE

Difficulty: Easy
Objective: Describe the process of visual program design and development.

2. *(p. 3)* Visual Basic is an object-oriented programming language.
TRUE

Difficulty: Easy
Objective: Explain the term object-oriented programming.

3. *(p. 4)* In Form1.Text, the word Text is referring to a method.
FALSE

Difficulty: Medium
Objective: Explain the concepts of classes, objects, properties, methods, and events.

4. *(p. 6)* Writing a program in Visual Basic is so easy that it is not necessary to do any planning.
FALSE

Difficulty: Easy
Objective: List and describe the three steps for writing a Visual Basic project.

5. *(p. 6)* When creating a project in Visual Basic, you should always begin by writing the Basic code.
FALSE

Difficulty: Medium
Objective: List and describe the three steps for writing a Visual Basic project.

6. *(p. 7)* A .vb file is a text file that can be opened with any text editor and it holds the code procedures that you write.
TRUE

Difficulty: Medium
Objective: Describe the various files that make up a Visual Basic project.

7. *(p. 8)* The .resx file is a text file that defines all resources used by the form including any graphics that are displayed on the form.
TRUE

Difficulty: Medium
Objective: Describe the various files that make up a Visual Basic project.

8. *(p. 13)* The Properties window is used to set the properties for the objects on your form.
TRUE

Difficulty: Medium
Objective: Identify the elements in the Visual Studio environment.

9. *(p. 13)* The Solution Explorer window is used to design a form that makes up your user interface.
FALSE

Difficulty: Medium
Objective: Identify the elements in the Visual Studio environment.

10. *(p. 14)* You are in run time when you design the user interface.
FALSE

Difficulty: Easy
Objective: Define design time, run time, and debug time.

11. *(p. 14)* You write Visual Basic code statements during design time.
TRUE

Difficulty: Easy
Objective: Define design time, run time, and debug time.

12. *(p. 21)* Snap lines are blue lines that assist the programmer in aligning controls.
TRUE

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

13. *(p. 23)* You can use the Properties window to change the properties of controls during run time.
FALSE

Difficulty: Easy
Objective: Define design time, run time, and debug time.

14. *(p. 25)* After you have added a label to a form, you can change the words that are displayed inside the button by changing the Text property.
TRUE

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

15. *(p. 29)* If the programmer does not write code for a button control, Visual Basic automatically provides code in the Click procedure that will close the form when the user clicks the button.
FALSE

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

16. *(p. 30)* Remark statements are not executable code.
TRUE

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

17. *(p. 31)* Programmers should add comments to their code in order to make the program logic easier to understand.
TRUE

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

18. *(p. 31)* Assignment statements work from left to right, assigning the value on the left side of the equal sign to the property named on the right side of the equal sign.
FALSE

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

19. *(p. 37)* In order to properly save changes that have been made to a Visual Basic project, you should choose Save All from the File menu.
TRUE

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

20. *(p. 37)* The Visual Studio IDE will automatically create a new folder for each new project.
TRUE

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

21. *(p. 46)* If a project runs without a syntax error, you can be certain that the code has performed the project's task correctly.
FALSE

Difficulty: Medium
Objective: Identify syntax errors, run-time errors, and logic errors.

Multiple Choice Questions

22. *(p. 3)* Microsoft Windows uses a GUI environment. GUI (pronounced "gooey") stands for _____.
A. Geographical User Interchange
B. Graphical User Interface
C. Geometrical Upper Intelligence
D. Grammatical User Incorporation

Difficulty: Easy
Objective: Describe the process of visual program design and development.

23. *(p. 3)* Visual Basic is a(n) _____.
A. Procedural programming language
B. Object-oriented programming language
C. Hyperlink programming language
D. Sequential programming language

Difficulty: Medium
Objective: Explain the term object-oriented programming.

24. *(p. 4)* In Visual Basic, we work with objects that have _____.
A. Programmer preference
B. Projects, solutions, and procedures
C. Classes, actions, and disciplines
D. Properties, methods, and events

Difficulty: Medium
Objective: Explain the concepts of classes, objects, properties, methods, and events.

25. *(p. 6)* When you plan a Visual Basic program, you follow a three-step process that should end with _____.
A. Setting the properties
B. Writing the Basic code
C. Coding all of the remark statements
D. Defining the user interface

Difficulty: Medium
Objective: List and describe the three steps for writing a Visual Basic project.

26. *(p. 7)* After the steps for planning a Visual Basic project are competed, you can begin actually constructing a program by _____.
A. Setting the properties
B. Creating the interface
C. Writing the code
D. Executing the next step based on the programmer's preference

Difficulty: Medium
Objective: List and describe the three steps for writing a Visual Basic project.

27. *(p. 7)* Which of the following shows the correct order for creating a Visual Basic program?
A. Set the properties, create the interface, write the code
B. Create the interface, set the properties, write the code
C. Create the interface, write the code, set the properties
D. Write the code, set the properties, create the interface

Difficulty: Medium
Objective: List and describe the three steps for writing a Visual Basic project.

28. *(p. 7)* The _____ holds information about the solution and the projects it contains. This is the file that you open to work on or run your project.
A. project file
B. resource file
C. solution file
D. .vb file

Difficulty: Easy
Objective: Describe the various files that make up a Visual Basic project.

29. *(p. 8)* Each Visual Basic project contains a text file that defines all resources used by the form. This file has a _____ extension.
A. Resx
B. Designer.vb
C. sln
D. vb

Difficulty: Medium
Objective: Describe the various files that make up a Visual Basic project.

30. *(p. 13)* The Visual Studio environment contains many different windows. Which window will be the user interface when the project is running?
A. The Toolbox
B. The Solution window
C. The Properties window
D. The Form Designer window

Difficulty: Medium
Objective: Identify the elements in the Visual Studio environment.

31. *(p. 13)* Which window do you open if you want to see all of the objects that you can add to a form?
A. The Toolbox
B. The Solution window
C. The Properties window
D. The Form Designer

Difficulty: Easy
Objective: Identify the elements in the Visual Studio environment.

32. *(p. 14)* While you are creating the user interface, you are in _____.
A. stop time
B. debug time
C. run time
D. design time

Difficulty: Easy
Objective: Define design time, run time, and debug time.

33. *(p. 14)* If you encounter a run-time error or you pause the program execution, you are in _____.
A. stop time
B. debug time
C. pause time
D. design time

Difficulty: Easy
Objective: Define design time, run time, and debug time.

34. *(p. 14)* A project in Visual Basic contains _____.
A. form(s)
B. controls
C. code
D. all of these

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

35. *(p. 14)* Which of the following are coding conventions required by the textbook?
A. Remarks must be included in the Declarations section.
B. Every event procedure must include remarks.
C. All objects (except labels not referred to in code) must be given descriptive names.
D. All of these

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

36. *(p. 25)* If you have added a label to a form and you want to make sure that nothing is displayed in it when the program begins, you must delete the contents of the _____.
A. Text property
B. Alignment property
C. Name property
D. Form window

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

37. *(p. 28)* Where does the Text property for a form appear?
A. In the lower left corner of the form
B. In the form's title bar
C. In the center of the form
D. In the Toolbox

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

38. *(p. 28)* The property used to display information in the title bar of a form is _____.
A. TitleBar
B. Name
C. Text
D. Title

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

39. *(p. 30)* Remarks, or comments, that programmers add to their code in order to make the program more readable and understandable, _____.
A. are executable code
B. begin with an asterisk (*)
C. are not considered "executable"
D. display on the form when the program runs

Difficulty: Easy
Objective: Write, run, save, print, and modify your first Visual Basic project.

40. *(p. 30)* If a line of code is not considered "executable", it must be _____.
A. a Close statement
B. an Assignment statement
C. a Remark statement
D. an event procedure

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

41. *(p. 31)* What is the code used to display the words "Visual Basic" in a label named TitleLabel?
A. TitleLabel.Name = "Visual Basic"
B. TitleLabel.Name.Visual Basic
C. TitleLabel.Text = "Visual Basic"
D. "Visual Basic" = TitleLabel.Text

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

42. *(p. 32)* Use the code, _____, to end a program.
A. Me.Exit
B. Me.Close
C. Me.End
D. Me.Stop

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

43. *(p. 35)* Which of the following choices CANNOT be used to start running a project?
A. Press and hold the CTRL key and then press the S key.
B. Open the Debug menu and choose Start Debugging.
C. Press the Start Debugging button on the toolbar.
D. Press F5.

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

44. *(p. 36)* When you create a new Visual Basic project and choose the disk location for your project, the VS IDE _____.
A. will create a folder and save all of the project files in the folder
B. will automatically save your project every 5 minutes
C. requires that the project file be stored on a hard drive
D. will create remarks in the Declarations section that list all of the files in the project

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

45. *(p. 41)* To print a form, add a _____ component to the component tray.
A. FormPrint
B. Print
C. PrintForm
D. PrintAll

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

46. *(p. 43)* Where does the text recommend that you code the programmer's name and remarks defining the purpose of a project?
A. In Visual Basic Help
B. In the event procedure for exiting the project
C. In the Declarations section at the top of the file
D. In the form's title bar

Difficulty: Medium
Objective: Write, run, save, print, and modify your first Visual Basic project.

47. *(p. 47)* _____ if the code Me.Cloose is contained in a project.
A. VB will automatically fix the misspelling when the program is run
B. A logic error will occur
C. The mispelling will cause a syntax error to occur and Me.Cloose will have a blue squiggly line underneath
D. No error will occur

Difficulty: Medium
Objective: Identify syntax errors, run-time errors, and logic errors.

48. *(p. 47)* When you break VB's rules for punctuation, format, or spelling, you generate a(n) _____.
A. run-time error
B. logic error
C. syntax error
D. arithmetic error

Difficulty: Medium
Objective: Identify syntax errors, run-time errors, and logic errors.

49. *(p. 49)* If a project runs, but the results are not correct, this is called a(n) _____.
A. run-time error
B. logic error
C. syntax error
D. arithmetic error

Difficulty: Medium
Objective: Identify syntax errors, run-time errors, and logic errors.

50. *(p. 50)* Finding and fixing programming errors is called _____.
A. recoding
B. debugging
C. fix-its
D. tuning

Difficulty: Medium
Objective: Identify syntax errors, run-time errors, and logic errors.

51. *(p. 48)* Visual Basic provides AutoCorrect, which is a handy way to fix _____.
A. syntax errors
B. logic errors
C. arithmetic errors
D. all types of errors

Difficulty: Medium
Objective: Use AutoCorrect to correct syntax errors.

52. *(p. 55)* With Visual Basic context-sensitive Help, you can view a Help topic by placing the insertion point in a word in the code window and pressing _____.
A. the Ctrl key and the H key
B. F1
C. F5
D. F8

Difficulty: Medium
Objective: Look up Visual Basic topics in Help.

Short Answer Questions

53. *(p. 14)* A form in a project needs a label, a text box, and a button. Explain how you will add the objects, set their properties, and reference the object in the basic code.

How to add the Objects—Select the control from the toolbox and then either double-click the control or move the pointer over the form. The pointer becomes a crosshair. Point to a location on the form, press the mouse button and drag the pointer. Release the mouse button.
How to set the Properties—Click on the control and then click the title bar of the properties window to make it the active window. Use the drop-down list to select the desired object. Find the property and change the setting.
How to reference an object in code—Use the Name property to refer to the control in the basic code. Use the Text property to change what the user will have displayed on the form.

Difficulty: Difficult
Objective: Write, run, save, print, and modify your first Visual Basic project.

Chapter 001 Introduction to Visual Basic 2010 Key

54. *(p. 33)* How do the Editor and IntelliSense help you write Visual Basic code?

The Visual Studio editor automatically displays remarks in green. The editor will also automatically indent lines between Private Sub and End Sub. If an object name matches a defined object, the Editor fixes the capitalization. The editor adds a blue squiggly line under the part of a line of code that the editor cannot interpret and a message will appear in the Task list at the bottom of the screen. The IntelliSense list pops up when you type a period after an object name. If IntelliSense does not pop up, it is likely that the control's name is misspelled. An entry in the IntelliSense is selected by pressing the spacebar key or by selecting it with the mouse.

Difficulty: Difficult
Objective: Write, run, save, print, and modify your first Visual Basic project.