Knowledge Assessment

Fill in the Blank

*Complete the following sentences by writing the correct word or words in the blanks provided.*

**1.** Use the property of the Service Installer class to specify a brief comment that explains the purpose of the service.

**2.** The property of the class indicates the account type under which a Windows service will run.

**3.** The property of the Event Log class is used to specify the application name to use when writing to an event log.

**4.** allows you to reuse existing functionality and layout for Windows Forms.

**5.** applications are applications in which multiple child windows reside under a single parent window.

**6.** A (n) is ideal for creating long-running applications that run in the background and do not have any user interface.

**7.** do not have a graphical user interface and use a text-mode console window to interact with the user.

**8.** applications provide their own window management functionality, whereas applications rely on the operating system for window management.

**9.** A delegate can be bound to any method whose signature matches that of the .

**10.** The can be bound to more than one method, allowing one-to-many notifications when an event is fired.

Multiple Choice

*Circle the letter that corresponds to the best answer.*

**1.** You need to design a Windows service that cannot be paused. Which of the following options will help you accomplish this task?

**a.** Set the Can Pause and Continue property of the Windows service to False.

**b.** Set the Can Pause and Continue property of the Windows service to True.

**c.** Set the Can Start property of the Windows service to True, but set the Can Shutdown property to False.

**d.** Do not override the On-Pause and On-Continue methods in the Windows service.

**2.** You have developed a Windows service. You need to install this service in order to install its functionality. Which of the following options should you choose to accomplish this task?

**a.** Use the Visual Studio Server Explorer.

**b.** User the Services node in the Computer Management window.

**c.** Use InstallUtil.exe.

**d.** Use gacutil.exe.

**3.** You have developed a Windows service. This service need to run as a non-privileged user in order to minimize any possible security risk. Which of the following accounts should you use for running this Windows service?

**a**. Local System

**b.** Network Service

**c.** Local Service

**d.** User (where the User Name property is set to a member of administrator role)

**4.** You are designing a Windows service application that contains only one Windows service. You would like this service to be started automatically when the computer is restarted. Which of the following classes should you use to specify this setting?

**a.** Service Base

**b.** Service Installer

**c.** Service Process Installer

**d.** Service Controller

**5.** You need to change the display and behavior of a Windows Form so that the form can contain multiple child windows. What should you do?

**a.** Set the Is Mdi Container property of the form to True.

**b.** Set the Mdi Parent property for all the child windows.

**c.** Set the Mdi Child property of the form.

**d.** Set the Is Mdi Child property of the form.

**6.** You are developing a Windows Form that responds to mouse events. When the mouse moves, you need to invoke the method Form1\_HandleMouse. Any code that you write should not affect any existing event-handling code. What statement should you use to attach the event handler to the event?

**a.**

this.MouseDown = new MouseEventHandler

(Form1\_HandleMouse);

**b.**

this.MouseMove = new MouseEventHandler

(Form1\_HandleMouse);

**c.**

this.MouseDown = new MouseEventHandler

(Form1\_HandleMouse);

**d.**

this.MouseMove = new MouseEventHandler

(Form1\_HandleMouse);

**7.** You are developing a Windows Form with a multiple document interface (MDI). You need to write code that arranges the child windows vertically within the client region of the MDI parent form. Which of the following statements should you use?

**a.** Layout Mdi (MdiLayout.TileVertical);

**b.** Layout Mdi (MdiLayout.Cascade);

**c.** Mdi Layout (LayoutMdi.TileVertical);

**d.** Mdi Layout (LayoutMdi.Cascade);

**8.** You are developing an application that will be run from the command line. Which of the following methods would you use for output to the command line?

**a.** Console.Read

**b.** Console.Write

**c.** File.Read

**d.** File.Write

**9.** You want to develop an application that displays a visual surface capable of displaying a variety of controls, such as text boxes, buttons, and menus. The application should also allow multiple child windows to reside under a single parent window. Which of the following types of application should you develop?

**a.** Console-based application

**b.** Windows service application

**c.** Single document interface (SDI) application

**d.** Multiple document interface (MDI) application

**10.** You are extending an existing Windows application. You would like to create a new form that derives its visual characteristics (including size, color, and some controls) from a previously created form. Which technique should you use to create the new form?

**a.** Visual inheritance

**b.** Visual encapsulation

**c.** Visual abstraction

**d.** Visual polymorphism

Competency Assessment

Scenario 5-1: Using Visual Inheritance

You need to create a Windows Form similar to the one you created in the Visual Inheritance exercise. However, this time, the requirement is that the background color of this form must match the currently selected color of the user’s desktop. How would you develop such a form?

Scenario 5-2: Handling the Mouse down Event

You are developing a game that allows users to hit a target area on a Windows Form with their mouse. You need to develop an experimental form that displays the X and Y coordinates of the location clicked by the user in the form’s title bar. How should you achieve this?

Proficiency Assessment

Scenario 5-3: Working with Console Input

You are developing a program that manipulates text. You need to write a console-based application that accepts text from the user and converts the text to upper-case letters. What code do you need to write to meet this requirement?

Scenario 5-4: Using the Net Utility (net.exe)

The net.exe command line utility comes installed with Windows. This utility allows you to perform various networking commands, including control of Windows services. You want to use net.exe to work with the previously created First Service Windows service. What steps must you take in order to pause, stop, and start a Windows service using the net.exe utility?