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A Composite Solution With Just One Click

Microsoft

70-511 PRACTICE EXAM

TS:Windows Apps Dev w/Microsoft .NET Framework 4

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Tootle questions: 228

70-511CSHARP

Question: 1

You use Microsoft .NET Framework 4 to create a Windows Forms application. You add a new class named Customer to the application. You select the Customer class to create a new object data source. You add the following components to a Windows Form:

- A BindingSource component named customerBindingSource that is data-bound to the Customer object data source.
- A set of TextBox controls to display and edit the Customer object properties. Each TextBox control is data-bound to a property of the customerBindingSource component.
- An ErrorProvider component named errorProvider that validates the input values for each TextBox control.

You need to ensure that the input data for each TextBox control is automatically validated by using the ErrorProvider component. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Implement the validation rules inside the Validating event handler of each TextBox control by throwing an exception when the value is invalid.
- B. Implement the validation rules inside the TextChanged event handler of each TextBox control by throwing an exception when the value is invalid.
- C. Implement the validation rules inside the setter of each property of the Customer class by throwing an exception when the value is invalid.
- D. Add the following code segment to the InitializeComponent method of the Windows Form.
this.errorProvider.DataSource = this.customerBindingSource;
- E. Add the following code segment to the InitializeComponent method of the Windows Form.
this.errorProvider.DataSource = this.customerBindingSource.DataSource;
this.errorProvider.DataMember = this.customerBindingSource.DataMember;

Answer: C, D

Question: 2

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a ListBox control named lbxItems that is data-bound to a collection of objects. Each object has a DisplayName property. You add a Button control to the application. You need to ensure that the Content property of the Button control is data-bound to the DisplayName property of the selected item of lbxItems. Which binding expression should you use?

- A. {Binding ElementName= lbxItems, Source=SelectedItem, Path=DisplayName}
- B. {Binding Source=lbxItems, ElementName=SelectedItem, Path=DisplayName}
- C. {Binding ElementName=lbxItems, Path=SelectedItem.DisplayName}
- D. {Binding Source=lbxItems, Path=SelectedItem.DisplayName}

Answer: C

Question: 3

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application.

You write the following code fragment.

```
<TextBox Text="{Binding Path=StringMember}" />
```

You need to ensure that the StringMember property of the data-bound object is updated immediately when the user types in the TextBox control.

Which binding expression should you use?

- A. { Binding Path=StringMember, Mode=TwoWay }
- B. { Binding Path=StringMember, NotifyOnSourceUpdated=True }
- C. { Binding Path=StringMember, NotifyOnTargetUpdated=True }
- D. { Binding Path=StringMember, UpdateSourceTrigger=PropertyChanged }

Answer: D

Question: 4

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a ListBox control to the application. The ListBox control is data-bound to an instance of a custom collection class of the Product objects named ProductList. The number of items of the data-bound collection is fixed. However, users can modify the properties of each of the Product objects in the collection. You need to ensure that changes made on the Product objects are automatically reflected in the ListBox control. What should you do?

- A. Implement the INotifyPropertyChanged interface in the Product class.
- B. Implement the INotifyCollectionChanged interface in the ProductList class.
- C. Set the Mode property of the Binding object of the ListBox control to TwoWay.
- D. Set the UpdateSourceTrigger property of the Binding object of the ListBox control to PropertyChanged.

Answer: A

Question: 5

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You plan to

allow users to customize the background colors, foreground colors, and font style of the application. You also plan to add a TextBlock control to the application. You write the following code fragment. (Line numbers are included for reference only.)

```

01 < Window.Resources >
02   < src:ocColorSchemes x:Key="colorschemes" / >
03   < src:ocFonts x:Key="fonts" / >
04 ...
05   < DataTemplate x:Key="StringTemplate" > < TextBlock
06     Text="{Binding Path=.)}" / > </DataTemplate >
07 ...
08   < HierarchicalDataTemplate x:Key="ColorSchemeTemplate"
09     ItemsSource="{Binding Path=ocColors}"
10     ItemTemplate="{StaticResource
11       StringTemplate}" > < TextBlock Text="{Binding
12         Path=.)}" / >
13   </HierarchicalDataTemplate >
14 </Window.Resources >
15

```

You need to ensure that the ContextMenu control is associated with the TextBlock control. You also need to ensure that the properties that can be customized are shown hierarchically. Which code fragment should you insert at line 15?

- A. < Grid >
< Menu >
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{Binding Path=.)" ItemTemplate="{StaticResource StringTemplate}" />
< MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource="{Binding Path=.)" ItemTemplate="{StaticResource StringTemplate}" />
</Menu>
< TextBlock Tidht="200" Height="100" Background="LightBlue" /></Grid >
- B. < Window.ContextMenu >
< ContextMenu >
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{ Binding Path ItemTemplate="{StaticRes ource StringTemplate}" />
< Menultern Header="Font" DataContext="{ StaticResource fonts!}" ItemsSource={, { Binding Path=.)" ItemTemplate="{StaticResource StringTemplate}" />
</ContextMenu >
</Window.ContextMenu >
- C. < Grid >
< TextBlock TJidth="200" Height= "100" Background="LightBlue" /></Grid >
< Window. ContextMenu >
< ContextMenu >
< TextBlock Width="200" Height="100" Background="LightBlue" />
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{Binding Path*.)" ItemTemplate="{StaticResource ColorSchemeTemplate}" />
< MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource="{Binding Path=.)" ItemTemplate="{StaticResource StringTemplate}" ></MenuItem >
</ContextMenu >
</Window.ContextMenu >
- D. < Grid >
< TextBlock Uidht="200" Height="100" Background="LightBlue" >
< TextBlock.ContextMenu >
< ContextMenu >
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{Binding Path=.)"

```
ItemTemplate="{StaticResource ColorSchemeTemplate}" />
<MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource="{Binding Path=."}
ItemTemplate="{StaticResource StringTemplate}" ></MenuItem>
</ContextMenu>
</TextBlock.ContextMenu>
</TextBlock></Grid>
```

Answer: D

Question: 6

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment.

```
<Window x:Class="MyProject.MainWindow" xmlns:local="clr-namespace:MyProject">
<Window.Resources>
<local:MyConverter x:Key="myConverter" />
</Window.Resources>
<ListBox Name="box">
<ListBox.ItemTemplate>
<DataTemplate>
<TextBlock
Text="{Binding Converter=(StaticResource myConverter), ConverterParameter=formatText}"
Background="{Binding Converter=(StaticResource myConverter), ConverterParameter=formatColor}"
IsEnabled="{Binding Converter=(StaticResource myConverter)}" />
</DataTemplate>
</ListBox.ItemTemplate>
</ListBox>
</Window>
```

You need to implement the MyProject.MyConverter class. What should you do?

- A. Implement the IValueConverter interface.
- B. Implement the IMultiValueConverter interface.
- C. Inherit from the TypeConverter class.
- D. Apply the TypeConverterAttribute attribute.

Answer: A

Question: 7

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains an ObservableCollection object named Pictures that contains several Picture objects. Each Picture object contains the Name and PictureFilePath properties. You add a ListBox control to the application. You need to ensure that the pictures are displayed in the ListBox control. Which code fragment should you use?

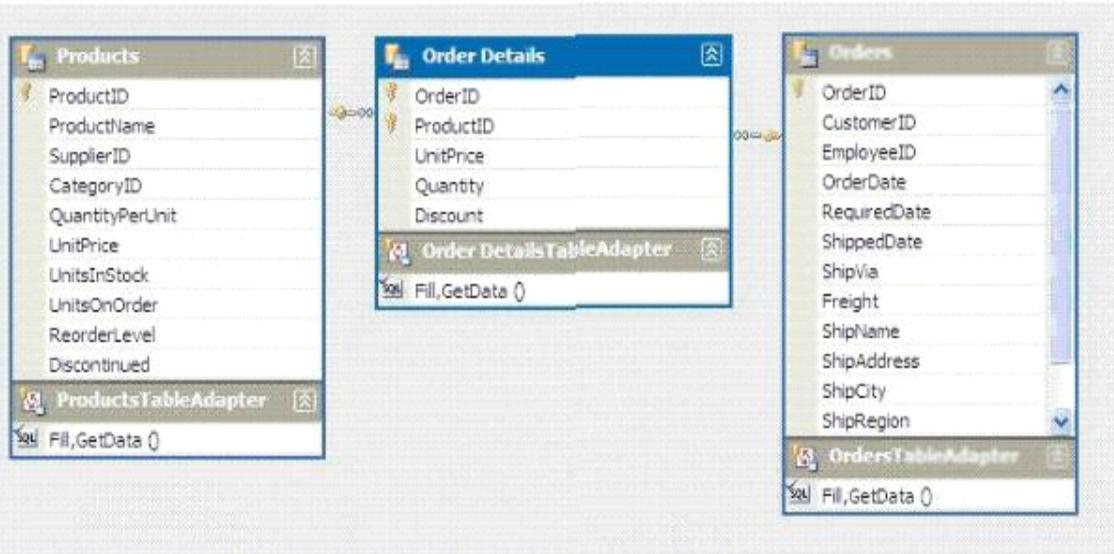
- A. <ListBox ItemsSource="{Binding Source={StaticResource pictures}}">
<ListBox.ItemTemplate> <DataTemplate>
<TextBlock>Text</TextBlock>
<Binding Path="PictureFilePath" /> </TextBlock>
</DataTemplate>
</ListBox.ItemTemplate>
</ListBox>
- B. <ListBox ItemsSource="{Binding Source={StaticResource pictures}}">
<ListBox.ItemTemplate> <DataTemplate>
<Image Source="{Binding Source={StaticResource pictures}, Path=PictureFilePath}"/>
</DataTemplate>
</ListBox.ItemTemplate>
</ListBox>

A. <ListBox> </ListBox>
 C. <ListBox ItemsSource="Binding Source={StaticResource pictures}">
 <ListBox. ItemTemplate> <DataTemplate>
 <TextBlock>Text</TextBlock>
 <Binding Path="Name" /> </TextBlock> </TextBlock> </DataTemplate> </ListBox. ItemTemplate> </ListBox>
 D. <ListBox ItemsSource="Binding Source={StaticResource pictures}">
 <ListBox. ItemTemplate> <DataTemplate>
 <Image Source="{Binding Path=PictureFilePath}"/> </DataTemplate> </ListBox. ItemTemplate> </ListBox>

Answer: D

Question: 8

You use Microsoft .NET Framework 4 to create a Windows Forms application. You have a dataset as shown in the following exhibit.



You plan to add a DataGridView to display the dataset. You need to ensure that the DataGridView meets the following requirements:

- Shows Order Details for the selected order.
- Shows only Order Details for items that have UnitPrice greater than 20
- Sorts Products by ProductName

Which code segment should you use?

- A. `ordersBindingSource.DataSource = productsBindingSource;`
`ordersBindingSource.DataMember = "FK_Order_Details_Products"; productsBindingSource.Filter = "UnitPrice > 20";`
`productsBindingSource.Sort = "ProductName";`
- B. `productsDataGridView.DataSource = ordersBindingSource;`
`productsBindingSource.Filter = "UnitPrice > 20";`
`productsBindingSource.Sort = "ProductName";`
- C. `order_DetailsBindingSource.DataSource = ordersBindingSource;`
`order_DetailsBindingSource.DataMember = "FK_Order_Details_Orders".`
`order_DetailsBindingSource.Filter = "UnitPrice > 20";`
`productsBindingSource.Sort = "ProductName";`
- D. `order_DetailsDataGridView.DataSource = ordersBindingSource; order_DetailsBindingSource.Filter = "UnitPrice > 20";`
`productsBindingSource.Sort = "ProductName";`

Answer: C

Question: 9

You are developing a Windows Forms application that contains a DataGridView control. The DataGridView is composed of several fields that capture the customer's name, address, and phone number. You have been asked to provide data validation in a DataGridView to prevent users from leaving the name field if the name field is empty. You need to ensure that users cannot tab out of the name field without entering data. What should you do?

- A. Validate the name field in the CellValidating event. Set e.Cancel = true if the name field is empty.
- B. Validate the name field in the CellErrorTextChanged event. Get e.RowIndex if the name field is empty.
- C. Validate the name field in the CellEnter event. Set the focus on the name field if the name field is empty.
- D. Validate the name field in the CancelRowEdit event. Set the focus on the name field if the name field is empty.

Answer: A

Question: 10

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <Canvas>
02   <Rectangle Stroke="Red" Stroke Thickness="5" Height="60"
03     Width="60" Canvas. Leftoff Canvas.Top="100"> 04
05   </Rectangle>
06 </Canvas>
```

You need to rotate the rectangle by 45 degrees by using its upper-left corner as the axis. Which code fragment should you insert at line 04?

- A. <Rectangle.RenderTransform>
<RotateTransform Angle="45" CenterX="0" CenterY="rf0" /></Rectangle.RenderTransform>
- B. <Rectangle.RenderTransform>
<RotateTransform Angle="45" CenterX="100" CenterY="100" /></Reccangle.RenderTransform>
- C. <Rectangle.LayoutTransform>
<RotateTransform Angle="45" CenterX="0" CenterY="0"/>
</Rectangle.LayoutTransform>
- D. <Rectangle.LayoutTransform>
<RotateTransforro Angle="45" CenterX="100" CenterY="100"/></Rectangle.LayoutTransform>

Answer: A

Question: 11

You are developing a Windows Presentation Foundation (WPF) application. You have the following style defined in the app.xaml file.

```
<Style x:Key="btnItalic" x:Naitie= "styleItalic"
```

```
TargetType="{x:Type Button}">
```

```
<Setter Property="FontStyle" Value="Italic"/> </Style>
```

You need to apply this style to a button named button1 in the application at run time.

Which code segment should you use?

- A. button1.Style =
this.FindName("styleitalic") as Style;
- B. button1.Style =
this.FindName("btnItalic") as Style;
- C. button1.Style =
this.FindResource("btnItalic") as Style;
- D. button1.Style =
this.FindResource("styleitalic") as Style;

Answer: C

Question: 12

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a custom command as a resource. The key of the command is saveCommand. You write the following code fragment. (Line numbers are included for reference only.)

```
01 < Canvas>
02
03 < Button >
04
05 </ Bucton >
06 </ Canvas >
```

You need to ensure that saveCommand is executed when the user clicks the Button control. What should you do?

- A. Insert the following code fragment at line 04.

```
< Button .Coiranand >
< StaticResource ResourceKey=" saveCoKiniand " /> </ Button .Command >
```

- B. Insert the following code fragment at line 04.

```
< Button .CommandBindings >
< CoRimandBinding Comitiand=" ( StaticResource saveCoimtiand ) " /> </ Button .CommandBindings >
```

- C. Insert the following code fragment at line 02.

```
< Canvas .CommandBindings >
< ComtnandBinding Command=" { StaticResoucce saveComroand } " /> </ Canvas .CommandB indings >
```

Replace line 03 with the following code fragment.

```
< Bucton CommandTarget=" { Binding RelativeSource={ RelativeSource Self }, Path=Parent } " >
```

- D. Insert the following code fragment at line 02.

```
< Canvas .CommandBindings >
< CommandBinding Command=" { StaticResoucce saveComroand } " /> </ Canvas .CommandBindings >
```

Replace line 03 with the following code fragment.

```
< Buccon CommandPararoec=" { Binding RelativeSource=( RelacieSource Self ), Path=Parent } " >
```

Answer: A

Question: 13

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application displays a list of books. You write the following code fragment. (Line numbers are included for reference only.)

```
01 < Window .Resources >
```

```
02      <XmlDataProvider x:Key="InventoryData" XPath="Books">
03      <x:XData>
04          <Books xmlns="">
05              <Book Title="XML in Action" Stock="in" />
06              <Book Title="Inside C#" Stock="out" />
07              <Book Title="Introducing Microsoft .NET" Stock="in"/>
08          </Books>
09      </x:XData>
10  </x:XmlDataProvider>
11  <Style x:Key="HighlightStyle" TargetType="{x:Type ListBoxItem}"> 12
12  </Style>
13  </Window.Resources>
14  <ListBox ItemContainerStyle="{StaticResource HighlightStyle}">
15      <ListBox.ItemsSource>
16          <Binding Source="{StaticResource InventoryData}" XPath="Book"/>
17      </ListBox.ItemsSource>
18      <ListBox.ItemTemplate>
19          <DataTemplate>
20              <TextBlock>
21                  <TextBlock.Text>
22                      <Binding XPath="@Title"/>
23                  </TextBlock.Text>
24              </TextBlock>
25          </DataTemplate>
26      </ListBox.ItemTemplate>
27  </ListBox>
28 </Window>
```

- A. <Style.Triggers>
<Trigger Binding.XmlNamespaceManager=""! Binding.XPath="6Stock"> Value="out">
<Setter Property="Background" Value="Red" />
</Trigger>
</Style.Triggers>
- B. <Style.Triggers>
<DataTrigger Binding="{Binding XPath=0Stock}" Value="out">
<Setter Property="Foreground" Value="Red" />
</DataTrigger>
</Style.Triggers>
- C. <Style.Triggers>
<Trigger Binding.XmlNamespaceManager="{Binding XPath=BookGStock}" Value="out">
<Setter Property="Foreground" Value="Red" />
</Trigger>
</Style.Triggers>
- D. <Style.Triggers>
<DataTrigger Binding="{Binding XPath=Book8Stock}" Value="out">
<Setter Property="Foreground" Value="Red" />
</DataTrigger>
</Style.Triggers>

Answer: B

Question: 14

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application.

You write the following code fragment.

```
< StackPanel TextBox.PreviewTextInput="StackPanel_PreviewTextInput" >
< TextBox Name="TxtBoxA" />
< TextBox Name="TxtBoxB" />
< TextBox Name="TxtBoxC" />
< /StackPanel >
```

You create an event handler named StackPanel_PreviewTextInput. You also have a collection of strings named Keywords. You need to ensure that TxtBoxA and TxtBoxB do not contain any of the strings in the Keywords collections. Which code segment should you use?

- A. private void StackPanel_PreviewTextInput(
object sender, TextCompositionEventArgs e) {
FrameworkElement feSource = sender as Framework Element:
if (resource.Name == "TxtBoxA" || feSource.Name == "TxtBoxB")
{
foreach(string keyword in Keywords)
if(e.Text.Contains(keyword))
{
e.Handled = false; return;
}
}
e.Handled = true;
}
}
- B. private void StackPanel_PreviewTextInput(
object sender, TextCompositionEventArgs e)
{
FrameworkElement feSource = e.Source as FrameworkElement; if
(feSource.Name == "TxtBoxA" || feSource.Name == "TxtBoxB")
{
foreach(string keyword in Keywords)
{
if(e.Text.Contains(keyword))
{
e.Handled = false;
return;
}
}
e.Handled = true;
}
}
- C. private void StackPanel_PreviewTextInput(
object sender, TextCompositionEventArgs e)
{
FrameworkElement feSource = sender as FrameworkElement;
if (feSource.Name == "TxtBoxA" || feSource.Name == "TxtBoxB")
{
foreach(string keyword in Keywords)
{

```
if(e.Text.Contains(keyword) )
{
e.Handled = true; return;
}
}
e.Handled = false;
}
}

D. private void StackPanel_PreviewTextInput(
object sender, TextCompositionEventArgs e)
{
FrameworkElement feSource = e.Source as FrameworkElement;
if (feSource.Name == "TextBoxA" || feSource.Name == "TextBoxB")
{
foreach(string keyword in Keywords) {
if(e.Text.Contains(keyword) )
{
e.Handled = true; return; }
}
e.Handled = false;
}
}
```

Answer: D

Question: 15

You are developing a user control for a Windows Presentation Foundation (WPF) application. The user control contains a button. Both the user control and the hosting control must receive the button click event. You need to ensure that the user control responds to the button click event before the hosting control responds to the event. What should you do?

- A. Use a bubbling routed event. In the button click event handler, set the Handled property to true.
- B. Use a bubbling routed event. In the button click event handler, set the Handled property to false.
- C. Use a standard Microsoft .NET event. Set the Handled property to true.
- D. Use a tunneling routed event. Set the Handled property to false.

Answer: C

Question: 16

You use Microsoft .NET Framework 4 to create a Windows Presentation Framework (WPF) application. You plan to create a custom control that contains four text input fields. Each of the text input fields within the control will contain a label. You need to ensure that the text input fields within the control can be validated by using a regular expression validator. Which class should you inherit from?

- A. TextBox
- B. TextElement
- C. UIElement
- D. UserControl

Answer: D

Question: 17

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <StackPanel>
02   <StackPanel.Resources>
03     <ControlTemplate
04       TargetType="{x:Type Button}"
05       x:Key="btn"> 06
06     </ControlTemplate>
07   </StackPanel.Resources>
08   <Button Content="Save"
09     Template="{StaticResource btn}" />
10   <Button Template="{StaticResource btn}">
11     <TextBox Text="Save" />
12   </Button>
13 </StackPanel>
```

You need to ensure that both Button controls display the "Save" text.

Which code fragment should you insert at line 06?

- A. <TextBlock Text="{Binding}" />
- B. <TextBlock Text="{TemplateBinding Content}" />
- C. <ContentPresentec Content="{Binding}" />
- D. <ContentPresentec />

Answer: D

Question: 18

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You want to add an audio player that plays .wav or .mp3 files when the user clicks a button. You plan to store the name of the file to a variable named SoundFilePath. You need to ensure that when a user clicks the button, the file provided by SoundFilePath plays. What should you do?

- A. Write the following code segment in the button onclick event.

```
System.Media.SoundPlayer player = new System.Media.SoundPlayer(SoundFilePath);
player.P lay () ;
```

- B. Write the following code segment in the button onclick event.

```
MediaPlayer player = new MediaPlayer();
player.Open(new URI(SoundFilePath), UriKind.Relative));
player,P lay () ;
```

- C. Use the following code segment from the PlaySound() Win32 API function and call the PlaySound function in the button onclick event.

```
[sysimport (dll="winmm.dll")]
public static extern long PlaySound(String SoundFilePath, long hModule, long dwFlags);
```

- D. Reference the Microsoft.DirectX Dynamic Link Libraries. Use the following code segment in the button onclick event.

```
Audio song = new Song(SoundFilePath);
song.CurrentPosition = song.Duration;
song.Play();
```

Answer: B

Question: 19

You use Microsoft .NET Framework 4 to create a Windows Forms application. You plan to use a Windows Presentation Foundation (WPF) control of the UserControl1 type hosted in an ElementHost control named elementHost1. You write the following code segment. (Line numbers are included for reference only.)

```
01  public class WPFInWinForms {
02      public WPFInWinForms
03      {
04          InitializeComponent();
05
06      }
07      private void OnBackColorChange(object sender, String propertyName, object value)
08      {
09          ElementHost host = sender as ElementHost;
10          System.Drawing.Color col = (System.Drawing.Color)value;
11          SolidColorBrush brush =
12              new SolidColorBrush(System.Windows.Media.Color.FromRgb(col.R, col.G, col.B));
13          UserControl1 uc1 = host.Child as UserControl1;
14          uc1.Background = brush;
15      }
16  }
```

You need to ensure that the application changes the background color of the hosted control when the background color of the form changes.

Which code segment should you insert at line 05?

- A. elementHost1.PropertyMap.Remove ("BackColor");
elementHost1.PropertyMap.Add("BackColor", new PropertyTranslator(OnBackColorChange));
- B. elementHost1. PropertyMap . Remove ("Background");
elementHost1.PropertyMap.Add("Background", new PropertyTranslator(OnBackColorChange));
- C. elementHost1.PropertyMap.Add("BackColor", new PropertyTranslator(OnBackColorChange));
elementHost1.PropertyMap.Apply("BackColor");
- D. elementHost1.PropertyMap.Add("Background", new PropertyTranslator(OnBackColorChange));
elementHost1.PropertyMap.Apply("Background");

Answer: A

Question: 20

You develop a Windows Presentation Foundation (WPF) application. This application is used to output data trends to customer service representatives.

A data trend analysis is performed in a function named UpdateTrendData. The trend analysis is a long-running process.

The application contains the following code segment.

```
Class MainWindow: Window {
    private void UpdateData(object arg)
```

```
{  
double data = UpdateTrendData();  
}  
}  
}
```

UpdateData is currently invoked on the UI thread when the form is first displayed. You need to process the data in a manner that does not cause the UI to freeze. What should you do?

- A. Use ThreadPool.SetMaxThreads(2, 2) and invoke UpdateData.
- B. Use ThreadPool.QueueUserWorkItem to invoke UpdateData.
- C. Use this.Dispatcher.BeginInvoke to invoke UpdateData passing in the priority of Normal.
- D. Use this.Dispatcher.BeginInvoke to invoke UpdateData passing in the priority of Background.

Answer: B

Question: 21

You are developing a Windows Presentation Foundation (WPF) application that contains a custom Button control. The custom Button control can be set as active by setting an IsActive property to true. You need to ensure that the IsActive property can be bound to a business object. What should you do on the custom Button control?

- A. Implement IsActive as a Microsoft .NET property.
- B. Implement IsActive as a Dependency property.
- C. Implement INotifyPropertyChanged
- D. Implement IQueryable.

Answer: B

Question: 22

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a property named ServiceContext to a control. You need the value of ServiceContext to flow to the child controls exactly like the value of the DataContext property of the FrameworkElement class. What should you do?

- A. Inherit the control class from the DependencyObject class.
- B. Register a dependency property.
In the options settings of the property metadata, specify the Inherits option.
- C. Declare a new property.
In the get and set methods of the new property, create an instance of the TraversalRequest class.
- D. Declare a new property.
In the get method of the new property call VisualTreeHelper.GetParent.
In the set method of the new property, call VisualTreeHelper.GetChild.

Answer: C

Question: 23

You are developing a Microsoft .NET 4 application. You need to ensure that security error trapping handles transparency violations. What should you do?

- A. Handle all thrown transparency violations explicitly.
- B. Handle only SecurityAction.Demand transparency violations.
- C. Handle only SecurityAction.Assert transparency violations.
- D. Handle only SecurityAction.PermitOnly transparency violations.

Answer: A

Question: 24

You use Microsoft .NET Framework 4 to create an application. The application contains a partially trusted client assembly and a server assembly. You create a custom sandboxed application domain. You need to ensure that the application can be executed in a partial-trust environment. What should you do?

- A. Apply the following attribute to the server assembly.
[assembly: AllowPartiallyTrustedCallers(PartialTrustVisibilityLevel=VisibleToAllHosts)]
- B. Apply the following attribute to the server assembly.
[assembly: AllowPartiallyTrustedCallers(PartialTrustVisibilityLevel=NotVisibleByDefault)]
- C. Apply the following attribute to the client assembly.
[assembly: AllowPartiallyTrustedCallers(PartialTrustVisibilityLevel=VisibleToAllHosts)]
- D. Apply the following attribute to the client assembly.
[assembly: AllowPartiallyTrustedCallers(PartialTrustVisibilityLevel=NotVisibleByDefault)]

Answer: B

Question: 25

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You want to localize the application to use the German locale settings. You need to allow the ResourceManager class to retrieve a neutral German locale version of the text to be displayed in the user interface (UI). Which file should you add to the project?

- A. Resources.de.xml
- B. Resources.de-DE.xml
- C. Resources.de.resx
- D. Resources.de-DE.resx

Answer: C

Question: 26

You are developing a Windows Presentation Foundation (WPF) application by using Microsoft Visual Studio 2010. While testing the application, you discover that a control is not positioned properly within a canvas. You need to view the Dependency properties of the control at run time. Which tool should you use?

- A. Disassembly Window
- B. Locals List
- C. Watch List
- D. WPF Tree Visualizer

Answer: D

Question: 27

You are developing a Windows Presentation Foundation (WPF) application. The application is for commercial use and requires a valid license key to be entered. You create a project type of Class Library that contains the code to validate license keys. You need to ensure that the user enters a valid license key during installation of the software. Which deployment should reference the class library?

- A. ClickOnce
- B. Setup Project
- C. XBAP
- D. XCopy

Answer: D

Question: 28

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a custom control that is used to display customer information. You discover that the custom control is not rendering correctly. You need to identify the WPF element that is causing the issue. What should you do?

- A. • Start the application in release mode.
- Place a breakpoint at the main entry point of the application.
- Use the debugger to step through the application code.
- B. • Start the application in debug mode.
- Place a breakpoint at the main entry point of the application.
- Use the WPF Tree Visualizer tool.
- C. • Enable IntelliTrace and configure Visual Studio to generate a trace log.
- Start the application in debug mode.
- D. • Enable IntelliTrace and configure Visual Studio to generate a trace log.
- Start the application by double-clicking the executable file (.exe).

Answer: B

Question: 29

You use Microsoft .NET Framework 4 to create a Windows application. You use ClickOnce technology to install the application on computers that run Windows 7 with User Access Control (UAC) enabled. The application requires access to environment variables on each computer. You need to ensure that users who do not have administrative permissions can install the application. Which deployment method should you use?

- A. Start from Web.
- B. Install from Web.
- C. Start from network share.
- D. Install from network share.

Answer: D

Question: 30

You are developing an XBAP application for your company intranet. During several development iterations, you manually copy the working executable, application, and deployment manifest files to the test Web server. You create an HTML file that has a hyperlink to the deployment manifest that you use for testing. During the next iteration, you enhance the XBAP application by making changes to the application. When you use the hyperlink to the deployment manifest to test the deployment, you do not see the changes. You need to ensure that the changes you make are visible when you test the deployment from your machine. What should you do?

- A. Restart Microsoft Internet Information Services (IIS). Then click the Install hyperlink again.
- B. Open a Visual Studio command prompt and run mage - cc. Then click the Install hyperlink again.
- C. Delete the application, deployment, and executable files from the Web server. Then rebuild the XBAP solution and manually copy the same files from the project bin directory to the Web server and click the Install hyperlink again.
- D. Delete the application, deployment, and executable files from the Web server. Then recopy the same files from the project bin directory to the Web server, restart IIS, and click the Install hyperlink again.

Answer: B

Question: 31

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application includes a function that is triggered by filling out a form and by clicking a button. Currently, the application is tested manually. You need to create an automated and iterative process to test the application. What should you do?

- A. use IntelliTrace.
- B. Use UISpy.exe to extract the user interface (UI) Information. Then, use MSTest.exe.
- C. Use classes in the System.Windows.Automation and System.Windows.Automation.Text namespaces.
- D. Use the Action Recording methodology to record the user interface (UI) actions. Then, use MSTest.exe.

Answer: C

Question: 32

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment to bind a customer object to several controls in a window.

<TextBox Text="{Binding Path=CustomerName}" Name="textBox1" />

When the application executes, you receive the following error message:

"System.Windows.Data Error: 35: BindingExpression path error: 'CustomerName' property not found on 'object' "Customer1 (HashCode=22613453). BindingExpression:Path=CustomerNarne; DataItem='Customer'" (HashCode=22613453);

target element is 'TextBox' (Name='textBox1');

target property is 'Text' (type 'String')"

You need to identify the source of the error.

What should you do?

- A. Use a Trace object.
- B. Use a Debug object.
- C. Use the WPF Visualizer.

- D. Use a PresentationTraceSources object.

Answer: D

Question: 33

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a window as shown in the following exhibit.



You need to define a DockPanel control that fits the window. Which code fragment should you use?

- A. <DockPanel>
<Button Content="Left"/>
<Button Content="Top" DockPanel.Dock="Top"/> <Button Content="Bottom" DockPanel.Dock="Bottom"/> <Button Content="Center"/> </DockPanel>
- B. <DockPanel>
<Button Content="Top" DockPanel.Dock="Top"/> <Button Content="Bottom" DockPanel.Dock="Bottom"/> <Button Content="Left"/> <Button Content="Center"/> </DockPanel>
- C. <DockPanel>
<Button Content="Left"/>
<Button Content="Top" DockPanel.Dock="Top"/> <Button Content="Center"/>
<Button Content="Bottom" DockPanel.Dock="Bottom"/> </DockPanel>
- D. <DockPanel>
<Button Content="Top" DockPanel.Dock="Top"/> <Button Content="Left"/> <Button Content="Center"/>
<Button Content="Bottom" DockPanel.Dock="Bottom"/> </DockPanel>

Answer: B

Question: 34

You are developing a Windows Presentation Foundation (WPF) application for a travel reservation system. You need to ensure that users can select a range of travel dates. What should you do?

- A. Add a single DatePicker control to the design surface.
- B. Add a single Calendar control to the design surface.
- C. Add a single MediaElement control to the design surface to display a calendar.
- D. Add the appropriate Windows Forms references to the project references. Add a single windows Forms DateTimePicker control to the design surface.

Answer: B

Question: 35

You use Microsoft .NET Framework 4 to create a custom Windows Presentation Foundation (WPF) application. Your environment includes several WPF applications. The applications use the same logo and style configuration as part of a corporate standard. You need to ensure that the existing applications can be updated to use the same logo and style settings without recompiling. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Mark the resource as an embedded resource in each application.
- B. Create a resource in an XAML file that contains the logo and style configurations.
- C. Create a resource in a custom control that contains the logo and style configurations.
- D. Add the resource as a Resource Dictionary in the Merged Dictionaries collection of each application.
- E. Use Resource Manager to read the content of the resource. Manually assign the style configurations included in the resource file to the appropriate control in each application.

Answer: B, D

Question: 36

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You need to ensure that users can view content in a book-reading format that displays two pages at a time. Which control should you use?

- A. FlowDocument
- B. FlowDocumentReader
- C. FlowDocumentPageviewer
- D. FlowDocumentScrollView

Answer: B

Question: 37

You are developing a Windows Presentation Foundation (WPF) application.

The application contains stylized body text and heading text. The heading text is a slight variation of the body text. You need to ensure that if the body text changes, the heading text automatically inherits those changes. What should you do?

- A. Set the Value property of the style setter to point to a static resource.
- B. Set the BasedOn property of the heading style to point to a static resource for the body text style.
- C. Set the Key property of the heading style to start with the name of the body text style.
- D. Set the TargetType property of the heading style to TextBlock.

Answer: A

Question: 38

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application

contains the following code fragment.

```
<StackPanel>
<TextBlock Style="{StaticResource HyStyle}">Hello World</TextBlock>
<Button Style="{StaticResource HyStyle}">Ok</Button>
</StackPanel>
```

You need to define a style that applies the following properties to the text in the StackPanel object:

- FontSize = 32
- FontWeight = Bold

Which code fragment should you use?

- A. <Style x:Key="MyStyle" TargetType="{x:Type Control}">
<Setter Property="TextElement.FontSize" Value="32" />
<Setter Property="TextElement.FontWeight" Value="Bold" />
</Style>
- B. <Style x:Key="MyStyle" TargetType="{ x : Type Framework-Element} ">
<Setter Property="TextElement.FontSize" Value="32" />
<Setter Property="TextElement.FontWeight" Value="Bold" />
</Style>
- C. <Style x:Key="MyStyle" TargetType="{x:Type TextElement}">
<Setter Property="Control.FontSize" Value="32" />
<Setter Property="Control.FontWeight" Value="Bold" />
</Style>
- D. <Style x:Key="MyStyle" TargetType="(x:Type UserControl)">
<Setter Property="Control.FontSize" Value="32" />
<Setter Property="Control.FontWeight" Value="Bold" />
</Style>

Answer: B

Question: 39

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a form named frmMain that contains a button named btnSave. You create a ProgressBar control named saveProgress. Initially, saveProgress is not displayed on frmMain. When a user clicks btnSave, you have the following requirements:

- saveProgress is slightly visible after 0.2 seconds
- saveProgress is fully visible after 1 second

You need to declare the corresponding storyboard.

You write the following code fragment. (Line numbers are included for reference only.)

```
01  <Storyboard xiKey" animateProgress" TaEgetName="saveProgress">
02
03  </Storyboard>
```

Which code fragment should you insert at line 02 to complete the declaration?

- A. <ObjectAnimationUsingKeyFrames Storyboard.TargetProperty="Visibility"> <DiscreteObjectKeyFrame KeyTime="00:00:00" Value="{x:Static Visibility.Collapsed}" /> <DiscreteObjectKeyFrame KeyTime="00:00:01" Value="{x:Static Visibility.Visible}" /> </ObjectAnimationUsingKeyFrames>
- B. <ObjectAnimationUsingKeyFrames Storyboard. TargetProperty="Visibility"> <DiscreteObjectKeyFrame KeyTime="0" Value="{x:Static Visibility.Collapsed}" /> <DiscreteObjectKeyFrame KeyTime="1" Value="{x:Static Visibility.Visible}" /> </ObjectAnimationUsingKeyFrames>

- C. <DoubleAnimation Storyboard.TargetProperty="Opacity" Duration="00:00:01" From="0" To="1" />
D. <DoubleAnimation Storyboard.TargetProperty="Opacity" Duration="1" From="0" To="1" />

Answer: C

Question: 40

You are developing a Windows Presentation Foundation (WPF) application. All of the application styles are in a file named Themes.dll. You have the following markup segment.

```
<Border Style="{StaticResource BlueBackground}"  
Height="100" Width="200">  
</Border>
```

BlueBackground is defined in a XAML file named BlueTheme.xaml. The XAML markup is compiled into the Themes.dll file. You need to ensure that the XAML file is referenced so that the application can apply the settings in the BlueBackground style. What should you do?

- A. Add the following line to Window.Resources.

```
<ResourceDictionary  
Source="/Themes;component/BlueTheme.xaml" />
```

- B. Add the following line to Window.Resources. <ResourceDictionary
Source="pack://application:,,,/Themes;BlueTheme.xaml" />

- C. Add the following line to Border.Resources.

```
<ResourceDiccionary  
Source="/Themes;component/BlueTheme.xaml" />
```

- D. Add the following line to Border.Resources.

```
<ResourceDictionary  
Source="pack://application:,,,/Themes;BlueTheme.xaml" />
```

Answer: A

Question: 41

You are developing a Windows Presentation Foundation (WPF) application. The main window of the application is defined by the following markup.

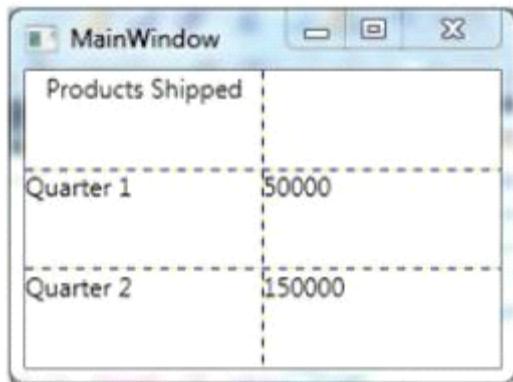
```
<Grid ShowGridLines="True">  
<Grid.ColumnDefinitions>  
<ColumnDefinition />  
<ColumnDefinition />  
</Grid.ColumnDefinitions>  
<Grid.RowDefinitions>  
<RowDefinition />  
<RowDefinition />  
<RowDefinition />  
</Grid.RowDefinitions>  
<TextBlock Grid.Row="0" HorizontalAlignment="Center">  
Products Shipped</TextBlock>  
<TextBlock Grid.Row="1" Grid.Column="0">  
Quarter 1</TextBlock>  
<TextBlock Grid.Row="2" Grid.Column="0">  
Quarter 2</TextBlock>
```

```

<TextBlock Grid.Row="1" Grid.Column="1">
50000</TextBlock>
<TextBlock Grid.Row="2" Grid.Column="1">
150000</TextBlock>
</Grid>

```

When the application is run, it appears as follows?



You need to ensure that the TextBlock control with the contents "Products Shipped" is horizontally centered on the Grid control. Which markup segment should you add to the TextBlock control?

- A. GridView.ColumnCollection="1,2"
- B. Grid.ColumnSpan="2"
- C. Manipulation.ManipulationParameter""2"
- D. TextBlock.TextAlignment="Center"

Answer: B

Question: 42

You are developing a Windows Presentation Foundation (WPF) application with the following class. (Line numbers are included for reference only)

```

01 public class DisplayData : INotifyPropertyChanged
02 {
03     public event
04         PropertyChangedEventHandler PropertyChanged;
05     private string Data;
06     public string Data
07     {
08         get
09         {
10             return _Data;
11         }
12     set
13     {
14
15         _Data = value; 16
16     }
17 }
18 }
19 private void NotifyPropertyChanged (string Info)
20 {
21     if (PropertyChanged != null)

```

```
22  {
23  PropertyChanged (this,
24    new PropertyChangedEventArgs(Info));
25  }
26 }
27 }
```

The UI is not being updated when the Data property is set. You need to ensure that the DisplayData class correctly updates the UI when the Data property is set. What should you do?

- A. Insert the following code at line 14.

```
NotifyPropertyChanged("Data");
```

- B. Insert the following code at line 16.

```
NotifyPropertyChanged("Data");
```

- C. Insert the following code at line 14.

```
NotifyPropertyChanged(value);
```

- D. Insert the following line at line 16.

```
NotifyPropertyChanged(value);
```

Answer: C

Question: 43

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a ListBox control to the application. The ListBox control is data-bound to an instance of a custom collection class of the Product objects named ProductList. You need to ensure that changes to ProductList are automatically reflected in the ListBox control. What should you do?

- A. Implement the INotifyPropertyChanged interface in the Product class.

- B. Implement the IQueryble<Product> interface in the ProductList class.

- C. Extend the DependencyObject class in the Product class.

- D. Extend the ObservableCollection<Product> class in the ProductList class.

Answer: D

Question: 44

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application.

You create a WPF window in the application.

You add the following code segment to the application.

```
public class ViewModel
{
  public CollectionView Data {get; set;}
  public class BusinessObject
  {
    public string Name { get; set; }
  }
```

The DataContext property of the window is set to an instance of the ViewModel class.

The Data property of the ViewModel instance is initialized with a collection of BusinessObject objects.

You add a TextBox control to the Window.

You need to bind the Text property of the TextBox control to the Name property of the current item of the CollectionView of the DataContext object. You also need to ensure that when a binding error occurs, the Text property of the TextBox control is set to N/A. Which binding expression should you use?

- A. {Binding Path=Data/Name, FallbackValue='N/A'}
- B. {Binding Path=Data.Name, FallbackValue='N/A'}
- C. {Binding Path=Data/Name, TargetNullValue='N/A'}
- D. {Binding Path=Data.Name, TargetNullValue= 'N/A'}

Answer: A

Question: 45

You are developing a Windows Presentation Foundation (WPF) application that displays pricing and inventory information. A list box's ItemsSource property has decimal and string types. Decimals represent price and strings represent messages such as "Discontinued"

The following markup is defined as follows. (Line numbers are included for reference only.)

```
01  <Window...
02      xmlns: clr="clr-namespace: System; assembly=mscor lib">
03      <ListBox ItemsSource="{Binding} ">
04          <ListBox. Resources> 05
05          </ListBox.Resources>
06      </ListBox>
07  </Window>
```

You need to ensure that data templates are used to format the strings without changes and the decimals as currency. Which markup segment should you insert at line 05?

- A. <DataTemplate x:Key="clr:String">
<TextBlock
Text="{ Binding StringFormat=Itein Error: {0}}"/>
</DataTemplate>
<DataTeroplate x:Key="clr:Decirrtal"> <TextBlock
Text="{Binding StringFormat=Item Price: {0:C}}" />
</DataTemplat.e>
- B. <DataTemplate x:Key "String" Template="clr :String">
<TextBlock
Text="{Binding ScringForwac=Item Error: {0}}" />
</DataTemplate>
<DataTemplate x : Key= "clr: Decimal "> <TextBlock
Text="{Binding StringFormat=Item Price: <0:C>}" /> </DataTemplate>
- B. <DataTemplate x:Key="Scring" Template="clr:String">
<TextBlock
Text="{Binding StringFormat=Item Error: <0>}" />
</DataTemplate>
<DataTemplate x: Key="Decimal" Template="clr:Decimal ">
<TextBlock
Text="{Binding StringFormat Item Price: <0:C>}" />
</DataTemplate>
- C. <DataTemplate DataType="(x: Type clr:String)">
<TextBlock
Text="{Binding StringFormat=Item Error: <0>}" />

```

</DataTemplate>
<DataTemplate DataType="{x:Type clr:Decimal}">
<TextBlock
Text="{Binding StringFormat=Item Price: <0:C}}" />
</DataTemplate>
D. <DataTemplate DataType="clr:String"> <TextBlock
Text="{Binding StringFormat=Item Error: {0}}" /> </DataTemplate>
<DataTemplate DataType "clr:Decimal"> <TextBlock
Text="{Binding StringFormat=Item Price: {0:C}}" /> </DataTemplate>

```

Answer: C

Question: 46

You are developing a Windows Presentation Foundation (WPF) application that displays opportunities from `List<T>` named Leads, where T is a class named Lead. The Lead class contains the properties Title and Revenue. You add a `DataGridView` control named `dgQualifiedLeads` to the `MainWindow.xaml` file. You set the `ItemSource` property of `dgQualifiedLeads` to `Leads` as follows. (Line numbers are included for reference only.)

```

01  ICollectionView Leads;
02  public MainWindow()
03  {
04      InitializeComponent();
05      Leads = CollectionViewSource.GetDefaultView(
06          new List<Lead>(
07              new Lead[]
08              {
09                  new Lead(){Title="Title1", Revenue=1250.78d},
10                  new Lead(){Title="Title2", Revenue=500.00d},
11                  new Lead(){Title="Title3", Revenue=2300.33d},
12                  new Lead(){Title="Title4", Revenue=2989.09d},
13                  new Lead(){Title="Title5", Revenue=1500.21d},
14              }
15          )
16      );
17      dgQualifiedLeads.ItemsSource = Leads;
18
19  }

```

You need to ensure that `CollectionViewSource` is used to filter the list to display only Lead objects with revenue of more than \$1,000. What should you do?

A. Insert the following code at line 18.

`Leads.Filter = new Predicate<object>(FilterOut);`

Add the following code segment to the code-behind of the `MainWindow.xaml` file.

`public bool FilterOut(object item)`

{

`Lead lead = item as Lead;`

`return (lead.Revenue < 1000d) ? true : false;`

B. Insert the following code at line 18.

`Leads.Filter = new Predicate<object>(FilterOut);`

Add the following code segment to the code-behind of the `MainWindow.xaml` file, `public bool FilterOut(object item)`

`Lead lead item as Lead;`

```
return (lead.Revenue > 1000d) ? false : true;
C. Insert the following code at line 18.
Leads.Filter = new
Predicate<object>((s) => ((Lead)s).Revenue > 1000d);
D. Insert the following code at line 18.
Leads.SortDescriptions.Add(new SortDescription(
"Revenue", ListSortDirection.Ascending));
```

Answer: B

Question: 47

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code segment. (Line numbers are included for reference only.)

```
01 public class Contact
02 {
03     private string _contactName;
04
05     public string ContactName {
06         get { return _contactName; }
07         set { _contactName = value; }
08     }
09
10 }
```

You add the following code fragment within a WPF window control.

```
<TextBox>
<TextBox.Text>
<Binding Path="ContactName" UpdateSourceTrigger="PropertyChanged">
<Binding.ValidationRules>
<DataErrorValidationRule />
</Binding.ValidationRules>
</Binding>
</TextBox.Text>
</TextBox>
```

The TextBox control is data-bound to an instance of the Contact class. You need to ensure that the Contact class contains a business rule to ensure that the ContactName property is not empty or NULL. You also need to ensure that the TextBox control validates the input data. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two).

A. Replace line 01 with the following code segment.

```
public class Contact : IDataErrorInfo
```

B. Replace line 01 with the following code segment.

```
public class Contact : ValidationRule
```

C. Replace line 01 with the following code segment.

```
public class Contact : INotifyPropertyChanging
```

D. Add the following code segment at line 04.

```
public event PropertyChangedEventHandler PropertyChanged;
```

Modify line 07 with the following code segment:

```
set {
    if (this.PropertyChanged != null)
        PropertyChanged(this, new
        PropertyChangedEventArgs("ContactName"));}
```

```
if (string.IsNullOrEmpty(value);
throw new ApplicationException("Contact name is required");
_contactName = value;
}
```

E. Add the following code segment at line 09.

```
public string Error {
    get { throw new Exception( string.Empty );
}
public string this[string columnName] { get {
    if (columnName == "ContactName" & &
        string.IsNullOrEmpty(this.ContactName))
        return "Contact name is required";
    return null;
}
}
```

Answer: A, E

Question: 48

You are developing a Windows Presentation Foundation (WPF) application. This application will be used to display customer data to customer service representatives. Phone numbers are stored as ten-digit numbers in the database. The markup is as follows.

```
<TextBlock Text="{Binding Path=PhoneNumber,
ConvertersStaticResource PhoneFormatConverter}" />
```

You need to ensure that phone numbers are displayed in the following format: (###) ### - ####

Which markup segment should you use?

- A. public object Convert (object value, Type targetType,
object parameter, CultureInfo culture)
{
return String.Format("{0:(###)###-####}",
(long)parameter);
}
- B. public object Convert (object value, Type targetType,
object parameter, CultureInfo culture)
{
return String.Format("{0: (###)###-####}", (long)value);
}
- C. public object ConvertBack(object value, Type targetType,
object parameter, CultureInfo culture)
{
return String.Format ("{0: (###)###-####}", (long)parameter);
}
- D. public object ConvertBack(object value, Type targetType,
object parameter, CultureInfo culture)
{
return String.Format("{0: (###)###-####}",
(long)value);
}

Answer: B

Question: 49

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a TreeView control to show the hierarchical structure of orders and order details. Each order contains an ObservableCollection named OrderDetails. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <Grid>
02   <Grid.Resources>
03     <src:Orders x:Key="orders"/>
04     <DataTemplate x:Key="OrderDetailTemplate">
05       <TextBlock Text="{Binding Path=.}" />
06     </DataTemplate> 07
07   </Grid.Resources>
08   <TreeView DataContext="{StaticResource orders}"
09     ItemsSource="{Binding Path=. }"
10     ItemTemplate="{StaticResource OrderTemplate}"/>
11 </Grid>
```

You need to ensure that the TreeView control meets the following requirements:

- Each order is shown as a TreeView node.
- The order nodes have order detail nodes as children.
- The order detail nodes have no children.

Which code fragment should you insert at line 07?

- A. <HierarchicalDataTemplate x:Key="OrderTemplate" DataType="Order" ItemTemplate="{StaticResource OrderDetailTemplate}">
<TextBlock Text="{Binding Path=.}" />
</HierarchicalDataTemplate>
- B. <HierarchicalDataTemplate x:Key="OrderTemplate" ItemsSource="{Binding Path=OrderDetails}" ItemTemplate="{StaticResource OrderDetailTemplate}">
<TextBlock Text="{Binding Path=.}" />
</HierarchicalDataTemplate>
- C. <HierarchicalDataTemplate x:Key="OrderTemplate" ItemsSource="{Binding Path=orders}" ItemTemplate="{StaticResource OrderDetailTemplate}">
<TextBlock Text="{Binding Path=.}" />
</HierarchicalDataTemplate>
- D. <HierarchicalDataTemplate x:Key="OrderTemplate" ItemsSource="{Binding Path=orders}" DataType="Order">
<TextBlock Text="{Binding Path=.}" />
</HierarchicalDataTemplate>

Answer: B

Question: 50

You use Microsoft .NET Framework 4 to create a Windows Forms application. You write the following code segment. (Line numbers are included for reference only.)

```
01 sealed class FormSettings : ApplicationSettingsBase  
02 {  
03     public String Description  
04     {  
05         get {return (String)this["Description"]; }  
06         set {this["Description"] = value;}  
07     }  
08 }  
09 }
```

You need to ensure that the first time each user opens the application, a text field displays the following message: "Please enter your setting."

Which code segment should you insert at line 03?

- A. [UserScopedSetting()]
[DefaultValue("Please enter your setting.")]
- B. [UserScopedSetting()]
[SettingsDescription("Description: Please enter your setting.")]
- C. [ApplicationScopedSetting()]
[DefaultValue("Please enter your setting.")]
- D. [ApplicationScopedSetting()]
[SettingsDescription("Description: Please enter your setting.")]

Answer: A

Question: 51

You are developing a Windows Presentation Foundation (WPF) application. You are implementing the security features for a function that requires File 10. The callers of this function that are higher in the stack do not have permission to read the C:\temp directory. The function also accesses other resources that require permission. You need to ensure that the function has the proper permissions to read the C:\temp directory, and that all other resources in the function can still be accessed. Which attribute should you include with the function?

- A. [FileIOPermissionAttribute(SecurityAction.Demand,
Read = "C:\\TEMP")]
- B. [FileIOPermissionAttribute(SecurityAction.Assert,
Read = "C:\\TEMP")]
- C. [FileIOPermissionAttribute(SecurityAction.PermitOnly,
Read = "C:\\TEMP")]
- D. [FileIOPermissionAttribute(SecurityAction.InheritanceDemand,
Read = "C:\\TEMP")]

Answer: C

Question: 52

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application uses the drag-and-drop functionality. You need to ensure that the drag-and-drop operation is stopped when a user moves the cursor outside the boundaries of the application form. Which enumeration member should you use?

- A. DragAction.Cancel

- B. DragAction.Drop
- C. DragDropEffects.None
- D. DragDropEffects.All

Answer: A

Question: 53

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You create a custom control named Wheel. You need to ensure that the Speed property of Wheel can be animated. What should you do?

- A. Inherit the DependencyObject class.
- B. Declare the Speed property as a dependency property.
- C. Declare an animation of the Speed property from within the code-behind file.
- D. Implement the System.Windows.Media.Animation.IAnimatable interface with the Wheel class.

Answer: B

Question: 54

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application uses the background worker process (BWP). When the user clicks a button, the background worker executes a method named DoCalculations asynchronously. You need to implement a progress bar on the user interface (UI) that informs the user of the progress of DoCalculations. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Modify the Value property of the progress bar in DoCalculations.
- B. Modify the Value property of the progress bar in the ProgressChanged event handler of the background worker.
- C. Modify the Value property of the progress bar in the RunWorkerCompleted event handler of the background worker.
- D. Call the ReportProgress method of the background worker in DoCalculations.
- E. Call the ReportProgress method of the background worker in the DoWork event handler of the background worker.

Answer: B, D

Question: 55

You use Microsoft .NET Framework 4 to create a Windows Forms application. You need to allow the user interface to use the currently configured culture settings in the Control Panel. Which code segment should you use?

- A. Thread.CurrentThread.CurrentCulture = Thread.CurrentThread.CurrentCulture;
- B. Thread.CurrentThread.CurrentCulture = Thread.CurrentThread.CurrentUICulture;
- C. Thread.CurrentThread.CurrentUICulture = CultureInfo.InstalledUICulture;
- D. Thread.CurrentThread.CurrentCulture = CultureInfo.InstalledUICulture;

Answer: A

Question: 56

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application has multiple data entry windows. Each window contains controls that allow the user to type different addresses for shipping and mailing. All addresses have the same format. You need to ensure that you can reuse the controls. What should you create?

- A. a user control
- B. a data template
- C. a control template
- D. a control that inherits the Canvas class

Answer: A

Question: 57

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a set of Button controls. You need to ensure that any button that contains no content is highlighted when the mouse pointer is located over it. Which code fragment should you use?

- A. < Style TargetType="{x:Type Button}">
...
< Setter Property="Background" Value="Yellow" />
< Style.Triggers >
< MultiTrigger >
< MultiTrigger.Conditions >
< Condition Property="IsMouseOver" Value="True" />
< Condition Property="Content" Value="{x:Null}" />
</MultiTrigger.Conditions >
</MultiTrigger >
</Style.Triggers >
</Style >
- B. < Style TargetType="{x:Type Button}">
...
< Style.Triggers >
< Trigger Property="IsMouseOver" Value="True" >
< Setter Property="Background" Value="Yellow" />
</Trigger >
< Trigger Property="Content" Value="{x:Null}" >
< Setter Property="Background" Value="Yellow" />
</Trigger >
</Style.Triggers >
</Style >
- C. < Style TargetType="{x:Type Button}">
...
< Setter Property="Background" Value="Yellow" />
< Style.Triggers >
< MultiTrigger >
< MultiTrigger.Conditions >
< Condition Property="IsMouseOver" Value="True" />
< Condition Property="Content" Value="Empty" />
</MultiTrigger.Conditions >

```
</MultiTrigger>
</Style.Triggers>
</Style>
D. <Style TargetType="{x:Type Button}">
...
<Style.Triggers>
<Trigger Property="IsMouseOver" Value="True" >
<Setter Property="Background" Value="Yellow" />
</Trigger>
<Trigger Property="Content" Value="Empty" >
<Setter Property="Background" Value="Yellow" />
</Trigger>
</Style.Triggers>
</Style>
```

Answer: A

Question: 58

You are developing a Windows Presentation Foundation (WPF) application to play audio files. You add a MediaElement control named mediaElement1 and a Button control named btnPlayAudio to the design surface. The MediaElement control Source attribute is set to an audio file. The LoadedBehavior attribute is set to Manual. You add the following code to the main window.

```
void playCommand_Executed(object sender, RoutedEventArgs e) {
mediaElement1.Play();
}
```

You set the command of the button to MediaCommands.Play.

You need to ensure that the application will play the audio file when the button is pressed.

What should you add to the constructor of the main window?

- A. RoutedCommand playCommand = new RoutedCommand(); playCommand.CanExecuteChanged += new EventHandler(playCommand_Executed); this.CommandBindings.Add(new CommandBinding(playCommand));
- B. RoutedUICommand playCommand = new RoutedUICommand(); playCommand.CanExecuteChanged += new EventHandler(playCommand_Executed); this.CommandBindings.Add(new CommandBinding(playCommand));
- C. CommandBinding playCommand =
new CommandBinding(MediaCommands.Play);
playCommand.CanExecute +=
new CanExecuteRoutedEventHandler(playCommand_Executed); this.CommandBindings.Add(playCommand);
- D. CommandBinding playCommand =
new CommandBinding(MediaCommands.Play);
playCommand.Executed +=
new ExecutedRoutedEventHandler(playCommand_Executed); this.CommandBindings.Add(playCommand);

Answer: D

Question: 59

You are developing a Windows Presentation Foundation (WPF) application. An event triggers a workflow such that a parent control executes the event handlers before the child controls. You need to ensure that if a parent control's event handler encounters an error, the subsequent handlers are not called. What should you do?

- A. use handlers for a tunneling routed event and mark the event as handled in the case of a problem.
- B. Use handlers for a tunneling routed event and mark the event as handled in the finally portion of a try-catch-finally code block.
- C. Use handlers for a bubbling routed event and mark the event as handled in the case of a problem.
- D. Use handlers for a bubbling routed event and set the Handled property of the RoutedEventArgs object to true in the catch portion of a try-catch-finally code block.

Answer: D

Question: 60

You are developing a Windows Presentation Foundation (WPF) application. You need to use XAML to create a custom control that contains two Button controls. From which base class should you inherit?

- A. FrameworkElement
- B. UIElement
- C. UserControl
- D. Button

Answer: C

Question: 61

You are developing a Windows Presentation Foundation (WPF) application. The application contains the following code in the code-behind file for an application window. (Line numbers are included for reference only.)

```
01 StackPanel stack = new StackPanel();  
02 Content = stack;  
03 for (int i=0; i<10; i++)  
04 {  
05     Button btn = new Button();  
06     btn.Name = ((char)('A' + i)).ToString();  
07     btn.Content = btn.Name + " says 'Click me' "; 08  
08 }  
09 }
```

You need to ensure that all of the Button controls that are defined in this code segment appear in the application window. Which code segment should you insert at line 08?

- A. stack.Children.Add(btn);
- B. stack.Children.Insert (i + 1, btn);
- C. Content = btn;
- D. Content = new Button() { Name = ('A' + i) . ToString()
Content = (i + " says 'Click me' ").ToString()};

Answer: A

Question: 62

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You create a window that contains a Button control and a MenuItem control. Both controls are labeled "Add sugar." The Command

properties of the Button and MenuItem controls are set to the same RoutedCommand named AddSugarCommand. You write the following code segment.

```
private void CanAddSugar (object sender, CanExecuteRoutedEventArgs e)
{ ... }
```

You need to ensure that when the CanAddSugar method sets e.CanExecute to false, the MenuItem and Button controls are disabled. What should you do?

- Create an event handler for the CanExecuteChanged event of the AddSugarCommand command. Call the CanAddSugar method from within the event handler.
- Inherit the AddSugarCommand from the RoutedUICommand class instead of the RoutedCommand class. Call the CanAddSugar method from within the constructor of the AddSugarCommand command.
- Add a CommandBinding object to the CommandBinding property of the MenuItem control. Set the CanExecute property of the CommandBinding object to the CanAddSugar method.
- Add a CommandBinding object to the CommandBindings property of the window. Set the Command property of CommandBinding to the AddSugarCommand command. Set the CanExecute property of the CommandBinding object to the CanAddSugar method.

Answer: D

Question: 63

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment. (Line numbers are included for reference only.)

```
01 < Page xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
02   xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
03   x:Class =" MyCompany.MediaControls " >
04     < StackPanel Background="Black" >
05       < StackPanel HorizontalAlignment="Center" Width="450" Orientation="Horizontal" >
06
07         <!-- Play button. -->
08         < Image Source="images\UI_play.gif" MouseDown="OnMouseDownPlayMedia" Margin="5" / >
09         <!-- Pause button. -->
10         < Image Source="images\UI_pause.gif" MouseDown="OnMouseDownPauseMedia" Margin="5" / >
11         <!-- Stop button. -->
12         < Image Source="images\UI_stop.gif" MouseDown="OnMouseDownStopMedia" Margin="5" / >
13     </StackPanel >
14   </StackPanel >
15 </Page >
```

You need to ensure that a video file begins to play only when a user clicks Play. Which code fragment should you insert at line 06?

- < MediaElement Source="media\numbers.TJTOV" Name="myMediaElement" Width="450" Height="250" LoadedBehavior="Play" UnloadedBehavior="Stop" Stretch="Fill">
- < MediaElement Source="media\numbers.wmv" Name="myMediaElement" Width="450" Height="250" LoadedBehavior="Manual" UnloadedBehavior="Stop" Stretch="Till"/>
- < MediaPlayer Source="media\numbers.umv" Name="myMediaElement" Width="450" Height="250" LoadedBehavior="Play" UnloadedBehavior="Stop" Stretch="Fill"/>
- < MediaPlayer Source="media\numbers.wmv" Name="myMediaElement" Width="450" Height="250" LoadedBehavior="Manual" UnloadedBehavior="Stop" Stretch="Fill"/>

Answer: B

Question: 64

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You create a Button control for the application. You need to ensure that the application meets the following requirements:

- When the mouse pointer is over the Button control, the background color of the button is set to red and the Button control appears bigger.
- When the mouse pointer is not over the Button control, the button returns to its original state.

What should you do?

- A. Create a template. Declare a VisualState element in the template.
- B. Create a StoryBoard animation. Add an EventTrigger class to the Button control that begins the StoryBoard animation.
- C. Create a ScaleTransform class. Bind the ScaleX and ScaleY properties of the Button control to the Background property by using a custom value converter.
- D. Add a method named ChangeAppearance in the code-behind file. Subscribe the ChangeAppearance method to the MouseEnter event of the Button control,

Answer: A

Question: 65

You are developing a Windows Presentation Foundation (WPF) application. You need to display HTML content from a Web page on the WPF form. What should you do?

- A. Add a FlowDocumentReader control to the design surface. Then create a FlowDocument control.
- B. Add a DocumentViewer control to the design surface. Then create a FixedDocument control.
- C. Add a WebBrowser control to the design surface. Then use the Navigate method to navigate the URI object.
- D. Add a ContentControl control to the design surface. Then reference a WebClient object to return an HTML string.

Answer: C

Question: 66

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You need to ensure that the application meets the following requirements;

- Displays a menu that is specific to the control selected by the user.
- Displays the menu next to the control.

Which control should you use?

- A. Menu
- B. PopUp
- C. ListBox
- D. ContextMenu

Answer: D

Question: 67

You create a Microsoft Windows Installer file for a Windows Presentation Foundation (WPF) application that requires Microsoft .NET Framework 4. You need to ensure that the installation starts only if .NET Framework 4 is already installed on the computer. What should you do?

- A. Use a custom action.
- B. Set the MinVersion property to .NET Framework 4.
- C. Set the Version property of Windows Installer to .NET Framework 4.
- D. Set the Version property of the Launch Condition to .NET Framework 4.

Answer: D

Question: 68

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application named MyApp.exe. You use Microsoft Windows Installer to package the application. You create an icon file named Application.ico. You need to associate Application.ico with MyApp.exe when MyApp.exe is deployed. What should you do?

- A. Use the File Types Editor tool.
- B. Rename the icon file to MyApp.exe.ico.
- C. Set the AddRemoveProgramIcon property to Application.ico.
- D. Use the File System Editor tool to set the Icon property to Application.ico.

Answer: D

Question: 69

You are developing a Windows Presentation Foundation (WPF) application. You are implementing a test strategy for the application. You need to ensure that the test class can repeat user input. From which base class should the test class inherit?

- A. AutomationElementIdentifier
- B. AutomationPeer
- C. Keyboard
- D. UICTues

Answer: B

Question: 70

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You discover that when the application runs, a user control is not rendered correctly. You need to find out the user interface (UI) element of the window that is causing the rendering problem. What should you do?

- A. Use the Local Window.
- B. Use the WPF Visualizer.
- C. Generate a trace log by using IntelliTrace.

D. Set a breakpoint at the control. Run the application.

Answer: A

Question: 71

You are developing a Windows Presentation Foundation (WPF) application. You configure `PresentationTraceSource` to track errors in a bound `TextBox` control in the application. You need to choose the window that the Trace Information is sent to. Which Visual Studio window should you select?

- A. Autos
- B. Immediate
- C. Locals
- D. Output

Answer: D

Question: 72

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You use the ClickOnce deployment methodology to distribute the application. You need to store application-specific data along with read/write permissions without requiring elevated permissions for the application. Where should you store the application data?

- A. In isolated storage
- B. On the database server
- C. In the ClickOnce data directory
- D. in the `App.config` file of the application

Answer: A

Question: 73

You are deploying a Windows Forms application. You use the Publishing wizard within Visual Studio to configure ClickOnce options. You need to ensure that a custom zone is created with specific permissions within the security tab of Visual Studio. What should you do?

- A. Disable the ClickOnce security settings. Then edit the `deployment.application` file.
- B. Enable the ClickOnce security settings. Choose the "This is a Partial Trust Application" radio button. Then edit the `app.manifest` file.
- C. Enable the ClickOnce security settings. Then edit the `deployment.application` file.
- D. Enable the ClickOnce security settings. Choose the "This is a Full Trust Application" radio button. Then edit the `app.manifest` file.

Answer: B

Question: 74

You are developing a Windows Presentation Foundation (WPF) application. You are implementing a test strategy for

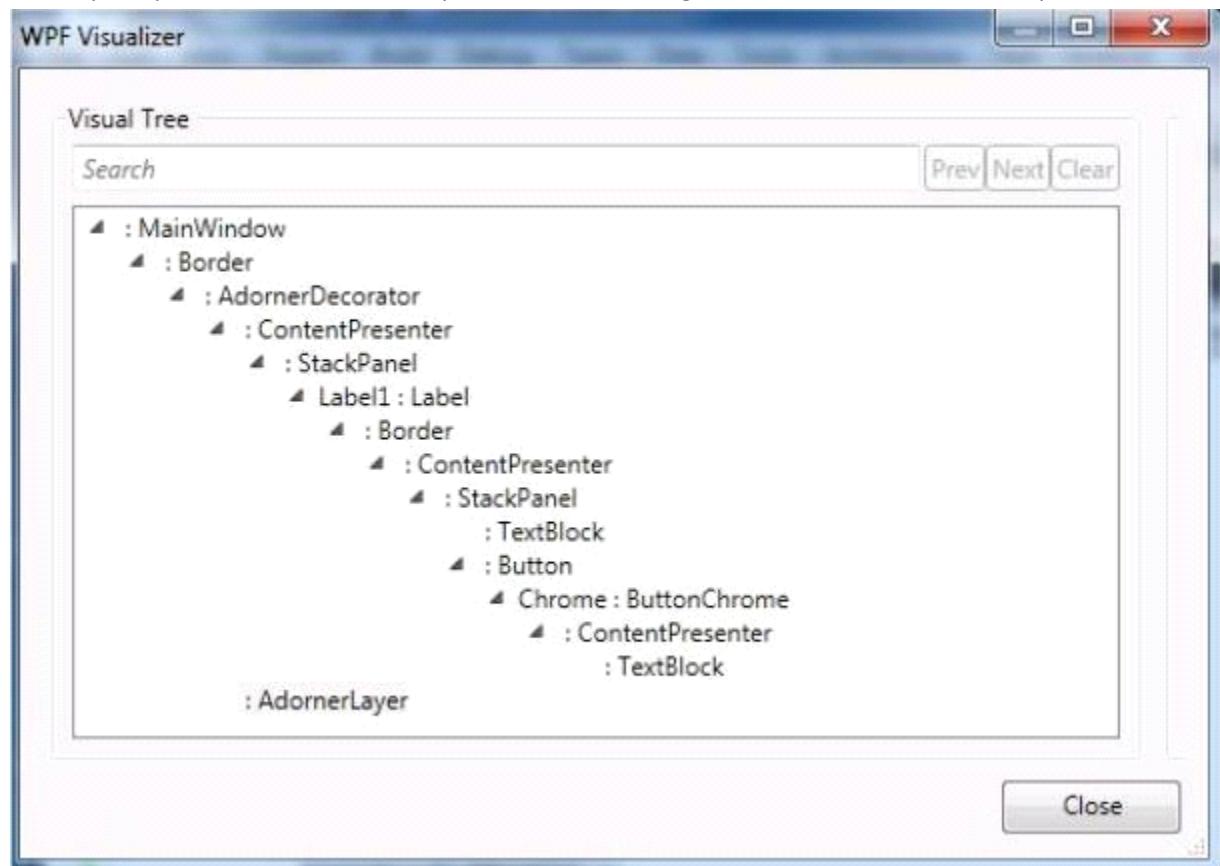
the application. You need to ensure that the history of your testing session can be rewound in the execution cycle so that the state of the application and events that occurred previously can be viewed. What should you use?

- A. Visual Studio debugger break points
- B. Coded UI Tests
- C. intelliTrace
- D. an error dump file

Answer: C

Question: 75

You are developing a Windows Presentation Foundation (WPF) application. There is an issue in the display of Label. When you open the WPF Visualizer, you see the following information in the left-hand panel of the Visualizer.



You need to identify the XAML markup for the Label control that caused the issue. Which markup segment corresponds to the Label control?

- A. <Label Name="Label1">
Button Click="Button_Click">
<StackPanel Orientation="Horizontal">
<TextB1ock Text="Click1= />
</StackPanel>
</Button>
</Label>
- B. <Label Name="Label1">
<StackPanel Orientation="Horizontal">

```
<Button Click="Button_Click">
<TextBlock Text="Click2" />
</Button>
</StackPanel>
</Label>
C. <Label Name="Label1">
<StackPanel Orientation="Horizontal">
<TextBlock Text="Click!" />
<Button Content="Click!" Click="Button_Click" />
</StackPanel>
</Label>
D. <Label Name="Label1"/>
<Button Click="Button_Click">
<StackPanel Orientation=Horizontal">
<TextB1ock Text="Click! " />
<Button Content="Click"Button_Click" />
</StackPanel>
</Button>
</Label>
```

Answer: C

Question: 76

You are developing a Windows Presentation Foundation (WPF) application for managing student information. You place a Button control named btnSort and a DataGrid control named dgStudents on the design surface of the MainWindow.xaml file. You create a Student class with two properties: FirstName and LastName. You create the following code segment in the constructor of the main window.

```
Students = New List(Of Student) (
    New Student() {
        New Student() With { .FirstName = "Nicole", _
            .LastName = "Holliday" _ 
        ...
    }
)
```

The DataGrid control displays the list of students unsorted. You need to ensure that the list of students is sorted by last name. Which code segment should you add to the click event handler of the Button control?

- A. `IEnumerable<Student> sortedStudents =
Students.OrderBy(s => s.LastName).ToList();
dgStudents.ItemsSource = sortedStudents;`
- B. `Students.Sort ();
dgStudents.ItemsSource = Students;`
- C. `Students.Reverse ()
dgStudents.ItemsSource = Students;`
- D. `IEnumerable<student> sortedStudents =
Students.OrderBy(s => s.LastName);
dgStudents.ItemsSource = sortedStudents;`

Answer: B

Question: 77

You are developing a Windows Presentation Foundation (WPF) application. A TextBlock control has DataContext bound to a static resource named Book. The ToolTip attribute of TextBlock displays the full book titles. You create a converter named TrimTitleConverter to shorten the book titles to three words in the Text attribute of the TextBox. You add the converter to the Resources section of the MainWindow.xaml file as follows. (Line numbers are included for reference only.)

```
01 <Window.Resources>
02   <src:TrimTitleConverter x:Key="TrimConverter" />
03   <src:Book x:Key="Book" />
04 </Window.Resources>
05 <Grid>
06   <TextBlock
07     ToolTip="{Binding Title}"
08     Text="{Binding Title}"
09     DataContext="{StaticResource ResourceKey=Book}" />
10 </Grid>
```

You need to ensure that the shortened book titles appear only in the Text attribute of TextBlock. Which markup segment should you use to replace lines 06 through 09?

- A. <TextBlock
ToolTip="{Binding Title,
Converter={StaticResource ResourceKey=TrimConverter}}"
Text-"(Binding RelativeSource-
{RelativeSource TeaplatedParent}, Path-ToolTip)"
DataContext = "{StaticResource ResourceKey=Book} "/>
- B. <TextBlock
ToolTip="{Binding Title,
Converter={StaticResource ResourceKeyTrimConverter}}"
Text=Binding RelativeSource-
{ReiativeSource Self}, Path-ToolTip}"
DataContext-"{StaticResource ResourceKey-Book) "/>
- C. <TextB1ock
ToolTip="{Binding Title)" Text="{Binding RelativeSource=
{RelativeSource TemplatedParent}, Path=ToolTip,
Converter{StaticResource ResourceKey=TrimConverter}}"
DataContext="{StaticResource ResourceKey=Book)"/>
- D. <TextBlock
ToolTip-"{Binding Title}"
Text={Binding RelativeSource=
{RelativeSource Self}, Path=ToolTip,
Converter={StaticResource ResourceKey=TrimConverter}}"
DataContext="{StaticResource ResourceKey=Book"/>

Answer: D

Question: 78

You are developing a Windows Presentation Foundation (WPF) application. You are writing data templates for a calendar. You must use the Weekend template for weekends and the Weekday template for weekdays. The Window

markup is as follows. (Line numbers are included for reference only.)

```

01 <Window xmlns:local="clr-namespace:MyApp">
02   <Window.Resources>
03     <DataTemplate x:Key="Weekend">
04       ...
05     </DataTemplate>
06     <DataTemplate x:Key="Weekday">
07       ...
08     </DataTemplate>
09     <local:WeekendSelector x:Key="WeekendSelector" />
10   </Window.Resources>
11 
12 </Window>
```

You need to ensure that the Weekend and Weekday templates are applied correctly to the ListBox control. Which markup segment should you insert at line 11?

- A. <ListBox
ItemTemplate="{StaticResource WeekendSelector}" />
- B. <ListBox
ItemTemplateSelector=" { StaticResource WeekendSelector} " />
- C. <ListBox
ItemTemplate=" {Binding WeekendSelector} " />
- D. <ListBox
ItemTemplateSelector={Binding WeekendSelector} />

Answer: B

Question: 79

You are developing a Windows Presentation Foundation (WPF) application to display service cases by category in a ListBox. You create a class named Case with the properties Description and Category, as follows.

```

public class Case
{
    public string Description { get; set; }
    public string Category { get; set; }
}

public class ServiceCases : ObservableCollection<Case>
{
    ...
}
```

The MainWindow.xaml contains the following markup segment.

```

<DockPanel>
  <ListBox Name="lstService">

    </ListBox>
</DockPanel>
```

You bind to the lstService control a static resource named ServiceCases. You need to ensure that the service cases are grouped by category. What should you do in the MainWindow.xaml file?

- A. Add the following markup segment to ListBox.Binding.


```
<ListBox.BindingGroup>
<BindingGroup Name="Category"/>
</ListBox.BindingGroup>
```

B. Add the following markup segment to DockPanel.Binding.

```
<DockPanel.BindingGroup>  
<BindingGroup Name="Category"/>  
</DockPanel.BindingGroup>
```

C. Add the following markup segment to CollectionViewSource.

```
<CollectionViewSource.GroupDescriptions/>
```

D. Add the following markup segment to CollectionViewSource.

```
<CollectionViewSource.GroupDescriptions>
```

```
<dat:PropertyGroupDescription PropertyName="Category" />
```

Answer: D

Question: 80

You are developing a Windows Presentation Foundation (WPF) application. The application contains a converter named DateOutputConverter that formats dates. The window is defined as follows. (Line numbers are included for reference only.)

```
01 <Window xmlns:m="clr-namespace:sampleWPF"  
02   x:Class="sampleWPF.MainWindow"  
03   xmlns="..."  
04   xmlns:x="...">  
05   <Window.Resources>  
06     <m:Order x:Key="shippedOrder" />  
07  
08   </Window.Resources>  
09   <StackPanel x:Name="orderStackPanel" Margin="4">  
10     </StackPanel>  
11 </Window>
```

The window must display the OrderDate value found in shippedOrder. The text box must display the OrderDate formatted by the DateOutputConverter. You need to ensure that the OrderDate is displayed and formatted correctly. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Insert the following code at line 07.

```
<m:DateOutputConverter x:Key="DateOutputConverter"/>
```

B. Insert the following code at line 10.

```
<TextBox text="{Binding OrderDate,  
Converter= {StaticResource internationalDateConverter}}"  
DataContext="{StaticResource ResourceKey=shippedOrder}"/>
```

C. Insert the following code at line 07.

```
<m:DateOutputConverter x:Key="internationalDateConverter"/>
```

D. Insert the following code at line 10.

```
<TextBox text="{Binding OrderDate}"/>
```

Answer: A, D

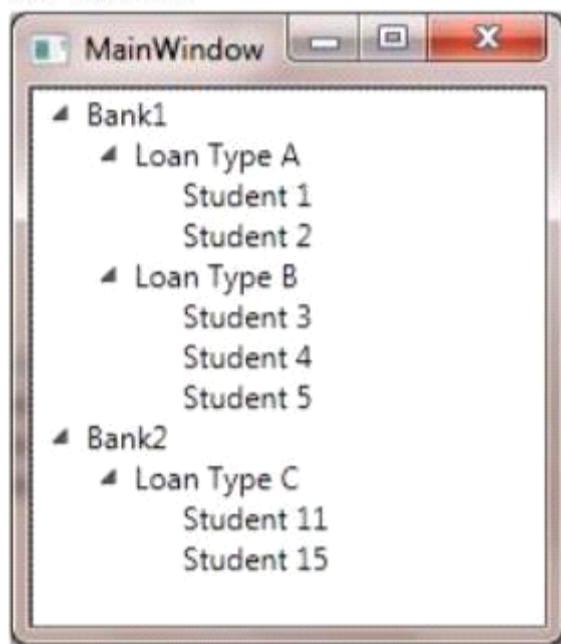
Question: 81

You are developing a Windows Presentation Foundation (WPF) application to display loan types by bank and students by loan type. You add the following markup segment to the MainWindow.xaml file. (Line numbers are included for reference only.)

```

01 <Window.Resources>
02   <DataTemplate x:Key="Students"
03     DataType="{x:Type mod:Student}"
04     <TextBlock Text="{Binding FullName}" />
05   </DataTemplate>
06   <HierarchicalDataTemplate x:Key="LoanList"
07     DataType="{x:Type mod:Loan}"
08     ItemsSource="{Binding Path=Students}"
09     ItemTemplate="{StaticResource ResourceKey= }">
10     <TextBlock Text="{Binding LoanName}" />
11   </HierarchicalDataTemplate>
12   <HierarchicalDataTemplate x:Key="BankList"
13     DataType="{x:Type mod:Lender}"
14     ItemsSource="{Binding Path=StudentLoans}"
15     ItemTemplate="{StaticResource ResourceKey= }">
16     <TextBlock Text="{Binding LenderName}" />
17   </HierarchicalDataTemplate>
18 </Window.Resources>
19 <Grid>
20   <TreeView x:Name="treeLoan"
21     ItemTemplate=
22     "{StaticResource ResourceKey=BankList}"/>
23 </Grid>

```



You need to ensure that the data appears in hierarchical form in a TreeView control. What should you do?

- A. At line 09, set the Resource Key to Students.
- At line 15, set the Resource Key to Loan List
- B. At line 09, set the Resource Key to BankList.
- At line 15, set the Resource Key to Lender.
- C. At line 09, set the Resource Key to LoanList.
- At line 15, set the Resource Key to Students.
- D At line 09, set the Resource Key to Lender.
- At line 15, set the Resource Key to BankList.

Answer: A

Question: 82

You are developing a Windows Presentation Foundation (WPF) application. The application has several visual controls on a main page. You need to restyle all of the UI-related elements on the main page at run time. Which class should you use to reference all these elements in a single call?

- A. visualTreeHelper
- B. LogicalTreeHelper
- C. UIElement
- D. ContentElement

Answer: A

Question: 83

You are developing a Windows Presentation Foundation (WPF) application. The application has an Image control. You need to ensure that a portion of the image displays in a circle in the control. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

- A. Add an Ellipse element to the control. Use Ellipse.Stroke and ImageBrush with the image as ImageSource.
- B. Add an Image.Clip element to the control. Use LineGeometry within Image.Clip.
- C. Add an Ellipse element to the control. Use Ellipse.Fill and ImageBrush with the image as ImageSource.
- D. Add an Image.Clip element to the control. Use EllipseGeometry within Image.Clip.

Answer: A, C

Question: 84

You are developing a Windows Presentation Foundation (WPF) application. The window has the following markup. (Line numbers are included for reference only.)

```

01 <Window.Resources>
02   <Style TargetType="{x:Type ListBox}">
03     <Setter Property="ItemsPanel">
04       <Setter.Value>
05         <ItemsPanelTemplate>
06           <StackPanel Orientation="Horizontal"
07             VerticalAlignment="Center"
08             HorizontalAlignment="Center"/>
09         </ItemsPanelTemplate>
10       </Setter.Value>
11     </Setter>
12     <Setter Property="Template">
13       <Setter.Value>
14         <ControlTemplate TargetType="{x:Type ListBox}">
15
16           </ControlTemplate>
17         </Setter.Value>
18       </Setter>
19     </Style>
22 </Window.Resources>

```

You need to ensure that all `ListBox` controls have a border that matches the background color of the `ListBox` template. Which markup segment should you insert at line 15?

- A. `<Border Background=" \TemplateBindding ListBox.Background } ">`
`<ItemsPresenter />`
`</Border>`
- B. `<Border Background=" \Binding ListBox.Background } ">`
`<ItemsPresenter />`
`</Border>`
- C. `<Border Background=" {TemplateBindding ListBox.Background } ">`
`<ContentPresenter />`
`</Border>`
- D. `<Border Background=" {Binding ListBox.Background } ">`
`<ContentPresenter />`
`</Border>`

Answer: A

Question: 85

You are developing a Windows Presentation Foundation (WPF) application. The application uses drag-and-drop functionality. You need to ensure that code is executed in the code-behind file when the dragged item is released onto the target element. Which enumeration should you use?

- A. `DragDropEffects.None`
- B. `DragAction.Cancel`
- C. `DragDropEffects.All`
- D. `DragAction.Drop`

Answer: D

Question: 86

You are developing a Windows Presentation Foundation (WPF) application. This application will be deployed to 20 countries. However, it will only be localized to some of those countries' regional dialects. The localization will be performed by using resource files. However, no culture will be specified in the project file with the UICulture tags. You must ensure that the application defaults to English for those regions that are not localized. What should you do?

- A. Add the following code segment to the AssemblyInfo file.

```
[assembly: NeutralResourcesLanguage("en-US",
    UltimateResourceFallbackLocation.Satellite)]
```

- B. Add the following code segment to the Application constructor. Thread.CurrentThread.CurrentCulture = new CultureInfo("en-US");

- C. Add the following code segment to the AssemblyInfo file.

```
[assembly: NeutralResourcesLanguage("en-US",
    UltimateResourceFallbackLocation.MainAssembly)]
```

- D. Add the following code segment to the Application constructor. Thread.CurrentThread.CurrentCulture = new CultureInfo("en-US");

Answer: C

Question: 87

You develop a Windows Presentation Foundation (WPF) application. The application runs on 64-bit machines only. The application architects want to store application settings in the registry. The users do not have write access to these settings. These application settings apply to everyone using the application. You need to read the application settings successfully from the registry. Which code segment should you use?

- A. RegistryKey

- OpenBaseKey{RegistryHive.LocalMachine,
RegistryView.Registry64}
- OpenSubKey(@"Software\MyProgram")
- GetValue("ConnectionString");

- B. RegistryKey

- OpenBaseKey(RegistryHive.CurrentUser,
RegistryView.Registry64)
- CreateSubKey(@"Software\MyProgram")
- GetValue("ConnectionString");

- C. RegistryKey

- OpenBaseKey(RegistryHive.LocalMachine.
RegistryView.Registry64)
- CreateSubKey(@"Software\MyProgram")
- GetValue("ConnectionString");

- D. RegistryKey

- OpenBaseKey(RegistryHive.CurrentUser,
RegistryView.Registry64)
- OpenSubKey(@"Software\MyProgram")
- GetValue("ConnectionString");

Answer: A

Question: 88

You are developing a Windows Presentation Foundation (WPF) application. Two styles, Blue and Green, are used for Border objects. The two styles have the same values for the CornerRadius and BrushThickness properties and different values for the Background property. You need to define the CornerRadius and BrushThickness settings in either the Blue or the Green style, but not both. What should you do?

- A. Separate Blue and Green into two files. Put the base settings in Blue and use MergedDictionaries. Ensure that the Green file is second in the list.
- B. Put Blue and Green into the same file. Put the base settings in Blue and mark Green as BasedOn Blue.
- C. Put Blue and Green into the same file. Put the base settings in Blue and mark Blue as BasedOn Green.
- D. Separate Blue and Green into two files. Put the base settings in Blue and use MergedDictionaries. Ensure that the Blue file is second in the list.

Answer: B

Question: 89

You are creating a Windows Presentation Foundation (WPF) application. A control periodically appears to alert the user of status changes within the application. You need to specify that each time the control appears, it fades out within half a second. Which markup segment should you add to the Storyboard element of the control?

- A. <DoubleAnimation Storyboard.TargetProperty="Opacity"
From="0" To=".5" />
- B. <DoubleAn^mation Storyboard.rargetProperty="Opacity"
From="1" To="0" Duration="0:0:.5"
RepeatBehavior="Forever" />
- C. <DoubleAnimation Storyboard.TargetProperty="Opacity"
From="1" To="0" Duration"0:0:.5" />
- D. <DoubleAnimation Storyboard. TargetProperty="Opacity"
From="1" To="0"
Duration="0:0:.5"
RepeatBehavior="0:0:5" />

Answer: C

Question: 80

You are developing a Windows Presentation Foundation (WPF) application page. The controls on the page must be enclosed within a single rectangular border. The border must contain an image in the header. You need to select a control to use as a container. Which control should you select?

- A. Border
- B. Rectangle
- C. Expander
- D. GroupBox

Answer: D

Question: 91

You are developing a Windows Presentation Foundation (WPF) application. The movement of a control within the application is animated. You need to ensure that the animated control is continually animated in one direction. What should you specify for the easing function of the animations?

- A. ElasticEase
- B. SineEase
- C. BackEase
- D. BounceEase

Answer: B

Question: 92

You are developing a Windows Presentation Foundation (WPF) application. The application uses a DockPanel control with its HorizontalAlignment property set to Left to divide the main window into three distinct columns. Each column is a panel that is responsible for the layout of its own controls. You need to reverse the order of the columns. What should you do?

- A. Set the HorizontalAlignment property to Right on the DockPanel.
- B. set the DockPanel.Dock property to Right on each of the panels.
- C. set the LayoutTransform property to Identity on the DockPanel.
- D. Set the FlowDirection property to RightToLeft on each of the panels.

Answer: B

Question: 93

You are developing a Windows Presentation Foundation (WPF) application page. The page uses extensive graphics controls and animation that require absolute positioning.

You need to select a control to use as a container. Which control should you select?

- A. StackPanel
- B. Canvas
- C. DockPanel
- D. Grid

Answer: B

Question: 94

You are developing a Windows Presentation Foundation (WPF) application. You pull employee information from an XML file named EmployeeData.xml. The XML file is as follows.

```

<Employees>
  <Employee Name="Bob" DateOfBirth="1990"
    Level="Accountant" Department="Accounting"/>
  <Employee Name="Amy" DateOfBirth="1987"
    Level="Accountant" Department="Accounting" />
  <Employee Name="Dan" DateOfBirth="1978"
    Level="Manager" Department="Accounting"/>
  <Employee Name="Joanna" DateOfBirth="1970"
    Level="Controller" Department="Accounting" />
</Employees>

```

The **ListBox** control you are using is declared as follows.

```

<ListBox x:Name="EmployeeList"
  ItemsSource="{Binding Source={StaticResource FeedData},
  XPath=Employee}">
  ...
</ListBox>

```

You need to display all the employee information from the XML file in EmployeeList. Which markup segment should you use?

- A. <Window.Resources>
<XmlDataProvider x:Key=FeedData"
Source="EmployeeData.xml" XPath="/Employees"/>
</Window.Resources>
- B. <ListBox.Resources>
<XmlDataProvider x:Key="FeedData"
Source="EmployeeData.xml" XPach="/Employees/Employee"/>
</ListBox.Resources>
- C. <Window.Resources>
<XmlDataProvider x:Key="FeedDoca"
Source="EmployeeData.xml" XPath""/Employees/Employee"/>
</Window.Resources>
- D. <ListBox.Resources>
<XmlDataProvider x:Key="FeedData"
Source="EmployeeData.xml" XPath="/Employees"/>
</ListBox.Resources>

Answer: A

Question: 95

You are developing a Windows Presentation Foundation (WPF) application. You add several TextBox controls within a StackPanel control. You next add several Image controls within a second StackPanel control. During testing, you discover that some of the textboxes do not appear in the proper layout. You need to quickly search for the textboxes and view their properties to identify which ones are incorrect. What should you do?

- A. Open the QuickWatch window and select the Text Visualizer.
- B. Open the Watch window and select the XML Visualizer.
- C. Open the Autos window and select the HTML Visualizer.
- D. Open the Locals window and select the WPF Tree Visualizer.

Answer: D

Question: 96

You are developing a Windows Presentation Foundation (WPF) application. An element binding consistently throws errors because the data retrieval is slow. You need to ensure that the PresentationTraceSource binding is configured to debug the source of these errors. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two).

- A. Add the following markup segment to the window definition.

```
xmlns:iagnostics=
"clr-namespace:System.Diagnostics;assembly=WindowsBase"
```

- B. Add the following markup segment to the window definition.

```
xmlns: diagnostics=
"clr-namespace:Microsoft.Build.Debugging;
assembly = Microsoft.Build"
```

- G. Add the following markup segment to the problem element.

```
"diagnostics: PresentationTraceSources . TraceLevel=High"
```

- D. Add the following markup segment to the problem element, "diagnostics:ConsoleTraceListener"

Answer: A, C

Question: 94

You are deploying a ClickOnce application manually in a test environment. You need to ensure that the deployment is signed with a self-signed test X.509 certificate. Which tool should you use to create the certificate?

- A. mage.exe

- B. cert2spc.exe

- C. makecert.exe

- D. Ic.exe

Answer: C

Question: 98

You are developing a Windows Presentation Foundation (WPF) application. You are planning the deployment strategy for the application. You need to write specific information to the registry during deployment for each user. Which deployment strategy should you use?

- A. XBAP

- B. ClickOnce

- C. xcopy

- D. Setup Project

Answer: D

Question: 99

You develop a Windows Presentation Foundation (WPF) application. You will use ClickOnce to publish it to a Web server. You add a Button control to the Windows Form with the following code segment. (Line numbers are included for reference only.)

```
01 UpdateCheckInfo info = null;
02 if (ApplicationDeployment.IsNetworkDeployed)
03 {
04     ApplicationDeployment updateCode =
05         ApplicationDeployment.CurrentDeployment;
06
07     if (info.UpdateAvailable)
08     {
09
10         MessageBox.Show("Update complete. Restart.");
11         Application.Restart();
12     }
13 }
```

You need to ensure that the update performs as designed. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Insert the following code at line 09.

```
updateCode.Update();
```

B. Insert the following code at line 06.

```
info = updateCode.CheckForDetailedUpdate();
```

C. Insert the following code at line 09.

```
updateCode.UpdateAsyncCancel();
```

D. Insert the following code at line 06.

```
updateCode.DownloadFileGroup(null);
```

Answer: A, C

Question: 100

You are developing a Windows Presentation Foundation (WPF) application. A window is defined in the following markup segment.

```
<Window x:Class="WpfApplication2.MainWindow"
    xmlns="..."
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml">
    <Grid x:Name="grid1"/>
</Window>
```

You need to add a Windows Forms Button control to the window programmatically. Which code segment should you use?

A. WindowsFormsHost host = new WindowsFormsHost();
System.Windows.Forms.Button wfButton =
new System.Windows.Forms.Button();
wfButton.Text = "Button";
host.Child = wfButton;
grid1.Children.Add(host);
B. WindowsFormsHost host = new WindowsFormsHost();
Systm.Windows.Controls.Button wfButton =

```

new System.Windows.Controls.Button();
wfButton.Content = "Button";
grid1.Children.Add(wfButton);
C. System.Windows.Controls.Button wfButton =
new System.Windows.Controls.Button () ;
wfButton.Content = "Button";
grid1.Children.Add(wfButton);
D. WindowsFormsHost host = new WindowsFormsHost();
System.Windows.Forms.Button wfButton =
new System.Windows.Forms.Button();
wfButton.Text = "Button";
host.FindName("Button");
grid1.Children.Add(host);

```

Answer: A

Question: 101

You develop a Windows Presentation Foundation (WPF) application. This application is used to output data trends to customer service representatives. You use threading to keep the UI responsive. You have a function named UpdateUI that updates all of the UI components. You use the following code to update the _Data variable. (Line numbers included for reference only.)

```

01 private string _Data;
02 private void UpdateData(object arg)
03 {
04     double data = UpdateTrendData();
05     _Data = data.ToString();
06
07 }

```

You need to update the user interface without knowing if you are on the UI thread. Which code segment should you insert at line 06?

```

A. this.Dispatcher.VerifyAccess();
var function = new Action(UpdateUI);
this.Dispatcher.BeginInvoke(function, null);
B. if (this.Dispatcher.CheckAccess ())
{
var function = new Action (Updated);
this.Dispatcher.BeginInvoke(function, null);
}
else
{
UpdateUI();
}
C. this.Dispatcher.VerifyAccess();
UpdateUI() ;
D. if (this.Dispatcher.CheckAccess() )
UpdateUI ();
}
else
{

```

```
var function = new Action(UpdateUI);
this.Dispatcher.BeginInvoke(function, null);
}
```

Answer: D

Question: 102

You are developing a Windows Presentation Foundation (WPF) application. A custom control has a dependency property that is bound to a property of type Int16 on a business layer object. You need to ensure that the bound value always falls within the range of an Int16 value, even if the value that the user enters does not. What should you do?

- A. Within the Dependency property's metadata, specify a callback for validation.
- B. Register the property type of the Dependency property as Int16.
- C. Specify code in the common language runtime (CLR) wrapper to adjust the value if it falls outside the range of an Int16 value.
- D. Within the Dependency property's metadata, specify a callback for coercion.

Answer: D

Question: 103

You are developing a Windows Presentation Foundation (WPF) application. A user control responds to a click event. The click event handler sets the Handled property to true. You need to ensure that a parent control responds to the event after the user control's handler executes. What should you do?

- A. Programmatically add an event handler to the parent control and set the HandledEventsToo property to true.
- B. Add a tunneling routed event handler to the parent control.
- C. Add a bubbling routed event handler to the parent control.
- D. Programmatically add an event handler to the parent control and set the HandledEventsToo property to false.

Answer: A

Question: 104

You are developing a Windows Presentation Foundation (WPF) application. A UserControl named usercontroll contains the following controls.

```
<StackPanel>
<Label Name="Label1" Content="Hello Exam!!!" />
</StackPanel>
```

You need to ensure that the content of the label displays "New Content!!!" programmatically from the code-behind of the application window that contains the UserControl. Which code segment should you use?

- A. var label = userControll.FindName ("label1") as Label;
label.Content = "New Content!!!";
- B. userControl1.Content = "New Content!!!";
- C. var label = userControl1.FindResource("label1") as Label;
label.Content = "New Content!!!";
- D. DependencyProperty dp =

```
DependencyProperty.Register("label1",
typeof(Label), typeof(Window), new PropertyMetadata("New Content!!!")); userControl1.CoerceValue(dp);
```

Answer: A

Question: 105

You are developing a Windows Presentation Foundation (WPF) application. The application contains the following markup.

```
<Expander x:Name="Products" IsExpanded="True">
  <Expander.Header>
    <ComboBox x:Name="Filter">
      ...
    </ComboBox>
  </Expander.Header>
  ...
</Expander>
```

You need to ensure that the Filter combo box is hidden when the expander is collapsed. What should you do?

- A. Add the following DataTrigger element to the Expander control.

```
<DataTrigger Binding="{Binding ElementName=Filter,
Path=Visibility}" Value="Collapsed">
  <Setter Property="Expander.IsExpanded"
Value="False" />
</DataTrigger>
```

- B. Add the following DataTrigger element to the ComboBox control.

```
DataTrigger Binding=" {Binding ElementName=Products,
Path=isExpanded} " Value="False">
  <Setter Property="UIElement.Visibility"
Value="Collapsed"/>
</DataTrigger>
```

- C. Add the following DataTrigger element to the ComboBox control.

```
<DataTrigger Binding=" {Binding ElementName=Products,
Path=Visibility}" Value="Collapsed">
  <Setter Property="Expander.IsExpanded"
Value="False"/>
</DataTrigger>
```

- D Add the following DataTrigger element to the Expander control.

```
<DataTrigger Binding="{Binding ElementName=Filter,
Path=isExpanded}" Value="False">
  <Setter Property="UIElementVisibility"
Value="Collapsed" />
</DataTrigger>
```

Answer: B

Question: 106

You are developing a Windows Presentation Foundation (WPF) application. Users can enter formatted percentages into text boxes. The markup is as follows.

```
<TextBox Text="{Binding Path=Percentage,
Converter={StaticResource PercentValueConverter}}" />
```

Percentage is a decimal property.

You need to store the percentages as their decimal values, not their display values.

Which code segment should you use?

- A. public object Convert (object value, Type targetType, object parameter, CultureInfo culture)


```

    {
        return ((decimal)value).ToString("P");
    }
  
```
- B. public object ConvertBack(object value, Type targetType, object parameter, CultureInfo culture)


```

    {
        return (decimal.Parse(value.ToString()) / 100);
    }
  
```
- C. public object ConvertBack(object value, Type targetType, object parameter, CultureInfo culture)


```

    {
        return (decimal.Parse(parameter.ToString()) / 100);
    }
  
```
- D. public object Convert(object value, Type targetType, object parameter, CultureInfo culture)


```

    {
        return ((decimal)parameter).ToString(nPn);
    }
  
```

Answer: B

Question: 107

You are developing a Windows Presentation Foundation (WPF) application. The WPF window contains a ListBox control that displays a list of customer names and genders. You add the following markup segment to the application. (Line numbers are included for reference only.)

```

01 <Grid>
02   <ListBox x:Name="lstCustomer">
03     <ListBox.ItemTemplate>
04       <DataTemplate>
05         <StackPanel Orientation="Horizontal">
06           <TextBlock Text="{Binding Path=CustName}"/>
07           <TextBlock Text=" , " />
08           <TextBlock Text="{Binding Path=Gender}"/>
09         </StackPanel>
10       </DataTemplate>
11     </ListBox.ItemTemplate>
12   </ListBox>
13 </Grid>
  
```

The WPF window renders the list of customers with empty Gender values. You need to convert the null values for Gender to the following string: "Gender Not Specified". Which binding attribute should you add at line 08?

- A. TargetNullValue='Gender Not Specified'
- B. FallbackValue='Gender Not Specified'
- C. StringFormat='Gender Not Specified'
- D. Source='Gender Not Specified'

Answer: A

Question: 108

You are developing a Windows Presentation Foundation (WPF) application. You add a TextBox control to the design surface and bind it to an underlying window resource named dsGiftCertificate. The control uses the binding XAML as follows.

```
<Binding Source="{StaticResource dsGiftCertificate}"  
UpdateSourceTrigger="LostFocus" Path="Coupon" />
```

You need to provide a custom error message in the tooltip of the TextBox when the user leaves the textbox. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Implement the INotifyPropertyChanged interface. Use the indexer for the custom validation and error message.
- B. Update the binding source as follows.

```
<Binding Source="{StaticResource dsGiftCertificate}"  
UpdateSourceTrigger="LostFocus" Path="Coupon"  
ValidatesOnDataErrors="True" />
```

- C. Implement the IDataErrorInfo interface. Use the indexer for the custom validation and error message.
- D. Update the binding source as follows.

```
<Binding Source="{StaticResource dsGiftCertificate}"  
UpdateSourceTrigger="Explicit" Path="Coupon"  
ValidatesOnDataErrors="True" />
```

Answer: B, C

Question: 109

You are developing a Windows Presentation Foundation (WPF) application. You have a class named Orders, which contains OrderId and ShipOn properties. You place a control in the MainWindow.xaml file, as follows. (Line numbers are included for reference only.)

```
01 <ComboBox x:Name="cmbOrders"  
02   ItemSource="{Binding Orders}">  
03  
04 </ComboBox>
```

When you run the application, the ComboBox control displays the class name for every row.

You need to ensure that the ComboBox control displays the OrderId and ShipOn values in columns. Which markup segment should you add at line 03?

- A. <ItemsControl.ItemsPanel>
<ItemsPanel>
<Grid>
<Grid.ColumnDefinitions>
<ColumnDefinition />
<ColumnDefinition />
</Grid.ColumnDefinitions>
<TextBlock Grid.Column="0" Text="{Binding ShipOn}"/>
<TextBlock Grid.Column="0" Text="{Binding OrderId}"/>
</Grid>

```
</ItemsPanelTemplate>
</ItemsControl.ItemsPanel>
B. <ItemsControl.ItemTemplate>
<DataTemplate>
<Grid>
<TextBlock Text="{Binding OrderId}"/>
<TextBlock Text="{Binding ShipOn}"/>
</Grid>
</DataTemplate>
</ItemsControl.ItemTemplate>
C. <ItemsControl.ItemTemplate>
<DataTemplate>
<Grid>
<Grid.ColumnDefinitions>
<ColumnDefinition />
<ColumnDefinition />
</Grid.ColumnDefinitions>
<TextBlock Grid.Column="0" Text="{Binding OrderId}"/>
<TextBlock Grid.Column="1" Text="{Binding ShipOn}"/>
</Grid>
</DataTemplate>
</ItemsControl.ItemTemplate>
D. <ItemsControl.ItemsPanel>
<ItemsPanelTemplate>
<Grid>
<TextBlock Text ="{Binding OrderId}/>
<TextBlock Text ="{Binding ShipOn}/>
</Grid>
</ItemsPanelTemplate>
</ItemsControl.ItemsPanel>
```

Answer: C

Question: 110

You are developing a Windows Presentation Foundation (WPF) application.

The application consists of:

- A window that contains controls organized into groups.
- Groups that are ordered vertically and that have individual headings.
- Controls within the groups that are ordered horizontally.
- Groups and controls that will be added dynamically at run time.

You need to ensure that the application meets the following requirements:

- The window must be resizable without affecting the layout of the controls.
- The controls within the groups must be laid out such that there is a minimum amount of spacing between groups.

What should you do?

- A. Use a Grid control with its VerticalAlignment property set to Stretch to organize the groups and specify the row definitions. Use Grid controls to organize the controls and specify the column definitions.
- B. Use a WrapPanel control to organize the groups with its Orientation property set to Vertical. Use WrapPanel controls to organize the controls with their Orientation property set to Horizontal.

- C. Use a ListBox control to organize the groups. Use Canvas controls to organize the controls.
- D. use a StackPanel control to organize the groups with its Orientation property set to Vertical. Use StackPanel controls to organize the controls with their Orientation property set to Horizontal.

Answer: D

Question: 111

You are developing a Windows Presentation Foundation (WPF) application. You need to ensure that the application includes a container control that supports logical scrolling by default. Which control should you select?

- A. stackPanel
- B. Canvas
- C. Grid
- D. WrapPanel

Answer: A

Question: 112

You are developing a Windows Presentation Foundation (WPF) application with multiple windows. The majority of the buttons within the application are styled consistently. However, three buttons within the application must be styled differently. You need to ensure that the application can handle this styling requirement. What should you do?

- A. Create the styles in the application resources. Specify the TargetType property to be Button for the default style but not for the three buttons.
- B. Create the styles in the main window resources. Specify the TargetType property to be Button for the default style but not for the three buttons.
- C. Create the styles in the main window resources. Omit the Key property for the default Button style and specify the Key property for the Button style and the three buttons.
- D. Create the styles in the application resources. Omit the Key property for the default Button style and specify the Key property for the Button style and the three buttons.

Answer: D

Question: 113

You are developing a Windows Presentation Foundation (WPF) application. The application's main window lists a series of controls horizontally until a control reaches the edge of the window. At that point, the series of controls continues on a new line. You need to ensure that this layout persists when the user changes the size of the window. What should you do?

- A. Place each control in a WrapPanel control and set its Orientation property to Horizontal.
- B. Place each control in a StackPanel control and set its Orientation property to Horizontal.
- C. Place the controls in a grid and define the rows and columns using star sizing.
- D. Place each control in a DockPanel control and set its Dock property to Left.

Answer: A

Question: 114

You are developing a Windows Presentation Foundation (WPF) application. The application is bound to a data source. You need to ensure that the style of controls is bound to values retrieved from the data source. What should you do?

- A. Create a Trigger element within the style that specifies the property value as the bound property.
- B. Create the style and specify the TargetType attribute.
- C. Create a DataTrigger element within the style that specifies the path to the bound property.
- D. Create the style and specify the BasedOn attribute.

Answer: C

70-511VB

Question: 1

You are developing a user control for a Windows Presentation Foundation (WPF) application. The user control contains a button. Both the user control and the hosting control must receive the button click event. You need to ensure that the user control responds to the button click event before the hosting control responds to the event. What should you do?

- A. Use a bubbling routed event. In the button click event handler, set the Handled property to True.
- B. Use a bubbling routed event. In the button click event handler, set the Handled property to False.
- C. Use a standard Microsoft .NET event. Set the Handled property to True.
- D. Use a tunneling routed event. Set the Handled property to False.

Answer: C

Question: 2

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application.

You write the following code fragment.

```
<StackPanel TextBox.PreviewTextInput="StackPanel_PreviewTextInput">
<TextBox Name="TxtBoxA"/>
<TextBox Name="TxtBoxB"/>
<TextBox Name="TxtBoxC"/>
</StackPanel>
```

You create an event handler named StackPanel_PreviewTextInput. You also have a collection of strings named Keywords. You need to ensure that TxtBoxA and TxtBoxB do not contain any of the strings in the Keywords collections. Which code segment should you use?

- ```
A. Private Sub StackPanel_PreviewTextInput(sender As Object, e As TextCompositionEventArgs)
Dim feSource As FrameworkElement = TryCast(sender, FrameworkElement)
If feSource.Name = "TxtBoxA" OrElse feSource.Name = "TxtBoxB" Then
 For Each keyword As String In Keywords
 If e.Text.Contains(keyword) Then
 e.Handled = True
 End If
 Return
End If
```

```
Next
e.Handled = True
End If
End Sub
B. Private Sub StackPanel_PreviewTextInput(sender As Object e As TextCompositionEventArgs)
Dim feSource As FrameworkElement = TryCast(e.Source, FrameworkElement)
If feSource.Name = "TxtBoxA" OrElse feSource.Name = "TxtBoxB" Then
For Each keyword As String In Keywords
If e.Text.Contains(keyword) Then e.Handled False Return
End If
Next
e.Handled = True
End If
End Sub
C. Private Sub StackPanel_PreviewTextInput(sender As Object, e As TextCompositionEventArgs)
Dim feSource As FrameworkElement = TryCast(sender, FrameworkElement)
If feSource.Name = "TxtBoxA" OrElse feSource.Name = "TxtBoxB" Then
For Each keyword As String In Keywords
If e.Text.Contains(keyword) Then e.Handled = True Return
End If
Next
e.Handled = False
End If
End Sub
D. Private Sub StackPanel_PreviewTextInput(sender As Object, e As TextCompositionEventArgs)
Dim feSource As FrameworkElement = TryCast(e.Source, FrameworkElement)
If feSource.Name = "TxtBoxA" OrElse feSource.Name = "TxtBoxB" Then
For Each keyword As String In Keywords
If e.Text.Contains(keyword) Then e.Handled = True
Return
End If
Next
e.Handled = False
End If
End Sub
```

---

**Answer: D**

---

### **Question: 3**

---

You are developing a Windows Presentation Foundation (WPF) application. You have the following style defined in the app.xaml file.

```
<Style x:Key="btnItalic" x:Name="styleItalic"
TargetType="{x:Type Button}"
Setter Property="FontStyle" Value="Italic"/> </Style>
```

You need to apply this style to a button named button1 in the application at run time.

Which code segment should you use?

- A. button1.Style =
TryCast(Me.FindName("styleItalic"), Style)
- B. button1.Style =

TryCast(Me.FindName("btnItalic"), Style)  
 C. button1.Style =  
 TryCast(Me.FindResource("btnItalic"), Style)  
 D. button1.Style =  
 TryCast(Me.FindResource("styleItalic"), Style)

---

**Answer: C**

---

#### **Question: 4**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application displays a list of books.

You write the following code fragment. (Line numbers are included for reference only.)

```

01 <Window.Resources>
02 <XmlDataProvider x:Key="InventoryData" XPath="Books">
03 <x:XData>
04 <Books xmlns-=>
05 <Book Title="XHL in Action" Stock="in" />
06 <Book Title="Inside CM" Stock="out" />
07 <Book Title="Introducing Microsoft .NET" Stock="in"/>
08 </Books>
09 </x:XData>
10 </XmlDataProvider>
11 <Style x:Key="MyItemStyle" TargetType="{x:Type ListViewItem}"> 12
12 </Style>
13 </Window.Resources>
14 <ListBox ItemContainerStyle=<StaticResource MyItemstyle)">
15 <ListBox.ItemsSource>
16 <Binding Source="{StaticResource InventoryData} XPath="Book"/>
17 </ListBox.ItemsSource>
18 <ListBox.ItemTemplate>
19 <DataTemplate>
20 <TextBlock>
21 <TextBlock.Text>
22 <Binding XPath="GTitle"/>
23 </TextBlock.Text>
24 </TextBlock>
25 </DataTemplate>
26 </ListBox.ItemTemplate>
27 </ListBox>
28 </Listbox>
```

You need to ensure that book titles that are out of stock appear in red.

Which code fragment should you insert at line 12?

- A. <Style.Triggers>  
<Trigger Binding. XmlNamespaceManager="<  
< Binding XPath=GStock>" Value="out">  
<Setter Property="Foreground" Value="Red" />  
</Trigger>  
</Style.Triggers>
- B. <Style.Triggers>  
<DataTrigger Binding="{Binding XPath=@Stock}" Value="out">

```
<Setter Property="Foreground" Value="Red" />
</DataTrigger>
</Style.Triggers>
C. <Style.Triggers>
<Trigger Binding. XmlNameSpaceManager="{Binding XPath=Book@Stock}" Value="out">
<Setter Property="Foreground" Value="Red" />
</Trigger>
</Style.Triggers>
D. <Style.Triggers>
<DataTrigger Binding="Binding XPath=Book@Stock}" Value="out">
<Setter Property="Foreground" Value="Red" />
</DataTrigger>
</Style.Triggers>
```

---

**Answer: B**

---

### **Question: 5**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Framework (WPF) application. You plan to create a custom control that contains four text input fields. Each of the text input fields within the control will contain a label. You need to ensure that the text input fields within the control can be validated by using a regular expression Validator. Which class should you inherit from?

- A. TextBox
- B. TextElement
- C. UIElement
- D. UserControl

---

**Answer: D**

---

### **Question: 6**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <Canvas>
02 <Rectangle Stroke="Red" StrokeThickness="5" Height="60"
03 Width="60" Canvas. Left100" Canvas.Top="100"> 04
05 </Rectangle>
06 </Canvas>
```

You need to rotate the rectangle by 45 degrees by using its upper-left corner as the axis,  
Which code fragment should you insert at line 04?

- A. <Rectangle.RenderTransform>
<RotateTransform Angle="45" CenterX="0" CenterY="0" />
</Rectangle.RenderTransform>
- B. <Rectangle.RenderTransform>
<RotateTransform Angle="45" CenterX="100" CenterY="100" /></Rectangle.RenderTransform>
- C. <Rectangle.LayoutTransform>
<RotateTransform Angle="45" CenterX="0" CenterY="0"/>
</Rectangle.LayoutTransform>

D. <Rectangle.LayoutTransform>  
<RotateTransform Angle="45" CenterX="100" CenterY="100'7"> </Rectangle.LayoutTransform>

---

**Answer: A**

---

### **Question: 7**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <StackPanel>
02 OtackPanel.Resources>
03 <ControlTemplate
04 TargetType="{x:Type Button}"
05 x:Key="btn">
06
07 </ControlTemplate>
08 </StackPanel.Resources>
09 <Button Content="Save"
10 Template="{StaticResource btn}" />
11 <Button Template="{StaticResource btn}">
12 <TextBox Text="Save" />
13 </Button>
14 </StackPanel>
```

You need to ensure that both Button controls display the "Save" text. Which code fragment should you insert at line 06?

- A. <TextBlock Text="{Binding}" />
- B. <TextBlock Text="{TemplateBinding Content}" />
- C. <ContentPresentet Content "Binding" />
- D. <ContentPresenter />

---

**Answer: D**

---

### **Question: 8**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You want to add an audio player that plays .wav or .mp3 files when the user clicks a button. You plan to store the name of the file to a variable named SoundFilePath. You need to ensure that when a user clicks the button, the file provided by SoundFilePath plays. What should you do?

- A. Write the following code segment in the button onclick event.  
Dim player As New System.Media.SoundPlayer(SoundFilePath)  
player.P lay ()
- B. Write the following code segment in the button onclick event.  
Dim player As New MediaPlayer()  
player.Open(New URI(SoundFilePath), UriKind.Relative)  
player.P lay ()
- C. Use the following code segment from the PlaySound() Win32 API function and call the PlaySound function in the button onclick event.  
<sysimport(dll := "winmm.dll")>

```
Public Shared Function PlaySound(SoundFilePath As [String], Module As Long, dwFlags As Long) As Long
End Function
D. Reference the Microsoft.DirectX Dynamic Link Libraries. Use the following code segment in the button onclick event.
Dim song As Audio = New Song (SoundFilePath)
song.CurrentPosition B song.Duration
song. Play ()
```

---

**Answer: B**

---

### **Question: 9**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a custom command as a resource. The key of the command is saveCommand. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <Canvas>
02
03 <Button>
04
05 </Button>
06 </Canvas>
```

You need to ensure that saveCommand is executed when the user clicks the Button control.  
What should you do?

- A. Insert the following code fragment at line 04.

```
<Button.Command>
<StaticResource ResourrcKey="saveComr[iand" />
</Button.Command>
```

- B. Insert the following code fragment at line 04.

```
<Button.CommandBindings>
<ConrniandBinding Command="{StaticResource saveCommand}" /></Button.CommandBindings>
```

- C. Insert the following code fragment at line 02.

```
<Canvas.CommandBindings>
<CommandBinding Command="{StaticResource saveCommand}" /></Canvas.CommandBindings>
```

Replace line 03 with the following code fragment.

```
<Button CommandTarget="{Binding RelativeSource={RelativeSource Self}, Path=Parent}">
```

- D. Insert the following code fragment at line 02.

```
<Canvas.Commandsxndings>
<CommandBinding Command="{StaticResource saveCommand}" /></Canvas.CommandBindings>
```

Replace line 03 with the following code fragment.

```
<Button CommandParameter="{Binding RelativeSource={RelativeSource Self}, Path=Parent}">
```

---

**Answer: A**

---

### **Question: 10**

---

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment to bind a customer object to several controls in a window.

```
<TextBox Text="{Binding Path=CustomerName}" Name="textBox1" />
```

When the application executes, you receive the following error message:

```
"System.Windows.Data Error: 35: BindingExpression path error: 'CustomerName' property not found on 'object'
"Customer" (HashCode=22613453)' BindingExpression:Path=CustomerName; DataItem='Customer'
(HashCode=22613453); target element is 'TextBox' (Name='textBox1')
target property is 'Text' (type 'String')"
```

You need to identify the source of the error. What should you do?

- A. Use a Trace object.
- B. Use a Debug object.
- C. Use the WPF Visualizer.
- D. Use a PresentationTraceSources object.

---

**Answer: D**

---

### **Question: 11**

---

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a custom control that is used to display customer information. You discover that the custom control is not rendering correctly. You need to identify the WPF element that is causing the issue. What should you do?

- A. Start the application in release mode.  
Place a breakpoint at the main entry point of the application.  
Use the debugger to step through the application code.
- B. Start the application in debug mode.  
Place a breakpoint at the main entry point of the application.  
Use the WPF Tree Visualizer tool.
- C. Enable IntelliTrace and configure Visual Studio to generate a trace log.  
Start the application in debug mode.
- D. Enable IntelliTrace and configure Visual Studio to generate a trace log.  
Start the application by double-clicking the executable file (.exe).

---

**Answer: B**

---

### **Question: 12**

---

You are developing an XBAP application for your company intranet. During several development iterations, you manually copy the working executable, application, and deployment manifest files to the test Web server. You create an HTML file that has a hyperlink to the deployment manifest that you use for testing. During the next iteration, you enhance the XBAP application by making changes to the application. When you use the hyperlink to the deployment manifest to test the deployment, you do not see the changes. You need to ensure that the changes you make are visible when you test the deployment from your machine. What should you do?

- A. Restart Microsoft Internet Information Services (IIS). Then click the Install hyperlink again.
- B. Open a Visual Studio command prompt and run mage -cc. Then click the Install hyperlink again.
- C. Delete the application, deployment, and executable files from the Web server. Then rebuild the XBAP solution and manually copy the same files from the project bin directory to the Web server and click the Install hyperlink again.
- D. Delete the application, deployment, and executable files from the Web server. Then recopy the same files from the project bin directory to the Web server, restart IIS, and click the Install hyperlink again.

---

**Answer: B**

---

---

### **Question: 13**

---

You are developing a Windows Presentation Foundation (WPF) application by using Microsoft Visual Studio 2010. While testing the application, you discover that a control is not positioned properly within a canvas. You need to view the Dependency properties of the control at run time. Which tool should you use?

- A. Disassembly Window
- B. Locals List
- C. Watch List
- D. WPF Tree Visualizer

---

**Answer: D**

---

---

### **Question: 14**

---

You use Microsoft .NET Framework 4 to create a Windows application. You use ClickOnce technology to install the application on computers that run Windows 7 with User Access Control (UAC) enabled. The application requires access to environment variables on each computer. You need to ensure that users who do not have administrative permissions can install the application. Which deployment method should you use?

- A. Start from Web.
- B. Install from Web.
- C. Start from network share.
- D. Install from network share.

---

**Answer: D**

---

---

### **Question: 15**

---

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application includes a function that is triggered by filling out a form and by clicking a button. Currently, the application is tested manually. You need to create an automated and iterative process to test the application.

What should you do?

- A. Use IntelliTrace.
- B. Use UISpy.exe to extract the user interface (UI) Information. Then, use MSTest.exe.
- C. Use classes in the System.Windows.Automation and System.Windows.Automation.Text namespaces.
- D. Use the Action Recording methodology to record the user interface (UI) actions. Then, use MSTest.exe.

---

**Answer: C**

---

---

### **Question: 16**

---

You are developing a Windows Presentation Foundation (WPF) application. The application is for commercial use and requires a valid license key to be entered. You create a project type of Class Library that contains the code to validate license keys. You need to ensure that the user enters a valid license key during installation of the software. Which deployment should reference the class library?

- A. ClickOnce
- B. Setup Project
- C. XBAP
- D. XCopy

---

**Answer: D**

---

### **Question: 17**

You use Microsoft .NET Framework 4 to create an application. The application contains a partially trusted client assembly and a server assembly. You create a custom sandboxed application domain. You need to ensure that the application can be executed in a partial-trust environment. What should you do?

- A. Apply the following attribute to the server assembly.  
<Assembly: AllowPartiallyTrustedCallers(ParcialTcustVisibilityLevel-VisibleToAllHosts)>
- B. Apply the following attribute to the server assembly.  
<Assembly: AllowPartiallyTrustedCallers(PartialTrustVislibilityLevel-NotVisibleByDefault)>
- C. Apply the following attribute to the client assembly.  
<Assembly: AllowPartiallyTrustedCallers(PartialTrustVisibilityLevel=VisibleToAllHosts)>
- D. Apply the following attribute to the client assembly.  
<Assembly: AllowPartiallyTrustedCallers(PartialTruscVisibilityLevel=NotVisibleByDefault)>

---

**Answer: B**

---

### **Question: 18**

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You want to localize the application to use the German locale settings. You need to allow the ResourceManager class to retrieve a neutral German locale version of the text to be displayed in the user interface (UI). Which file should you add to the project?

- A. Resources.de.xml
- B. Resources.de-DE.xml
- C. Resources.de.resx
- D. Resources.de-DE.resx

---

**Answer: C**

---

### **Question: 19**

You use Microsoft .NET Framework 4 to create a Windows Forms application. You plan to use a Windows Presentation Foundation (WPF) control of the UserControl1 type hosted in an ElementHos1 control named elementHost1.

You write the following code segment. (Line numbers are included for reference only.)

```
01 Public Class UPFInUIforms
02 Public Sub WPFIWInforms()
03 InitializeComponent() 04
05 End Sub
06 Private Sub OnBackColorChange(ByVal sender As Object, ByVal propertyName As [String], ByVal value As Object)
```

```
07 Dim host As ElementHost = TryCast(sender, ElementHost)
08 Dim col As System.Drawing.Color = DirectCast(value, System.Drawing.Color)
09 Dim brush As New SolidColorBrush(System.Windows.Media.Color.FromArgb(col.R, col.G, col.B))
10 Dim ucl As UserControl = TryCast(host.Child, UserControl)
11 ucl.Background = brush
12 End Sub
13 End Class
```

You need to ensure that the application changes the background color of the hosted control when the background color of the form changes. Which code segment should you insert at line 04?

- A. elementHost1.PropertyMap.Remove("BackColor")  
elementHost1.PropertyMap.Add("BackColor", New PropertyTranslator(OnBackColorChange))
- B. elementHost1.PropertyMap.Remove("Background")  
elementHost1.PropertyMap.Add("Background", New PropertyTranslator(OnBackColorChange))
- C. elementHost1.PropertyMap.Add("BackColor", New PropertyTranslator(OnBackColorChange))  
elementHost1.PropertyMap.Apply("BackColor")
- D. elementHost1.PropertyMap.Add("Background", New PropertyTranslator(OnBackColorChange))  
elementHost1.PropertyMap.Apply("Background")

---

**Answer: A**

---

### **Question: 20**

---

You develop a Windows Presentation Foundation (WPF) application. This application is used to output data trends to customer service representatives. A data trend analysis is performed in a function named UpdateTrendData. The trend analysis is a long-running process. The application contains the following code segment.

Class MainWindow

```
Private Sub UpdateData(ByVal arg As Object) Dim data As Double = UpdateTrendData()
```

```
...
```

```
End Sub
```

```
End Class
```

UpdateData is currently invoked on the UI thread when the form is first displayed. You need to process the data in a manner that does not cause the UI to freeze.

What should you do?

- A. Use ThreadPool.SetMaxThreads(2,2) and invoke UpdateData.
- B. Use ThreadPool.QueueUserWorkItem to invoke UpdateData.
- C. Use Me.Dispatcher.BeginInvoke to invoke UpdateData passing in the priority of Normal.
- D. Use Me.Dispatcher.BeginInvoke to invoke UpdateData passing in the priority of Background.

---

**Answer: B**

---

### **Question: 21**

---

You are developing a Windows Presentation Foundation (WPF) application that contains a custom Button control. The custom Button control can be set as active by setting an IsActive property to True. You need to ensure that the IsActive property can be bound to a business object. What should you do on the custom Button control?

- A. Implement IsActive as a Microsoft .NET property.
- B. Implement IsActive as a Dependency property.

- C. Implement `INotifyPropertyChanged`.
- D. Implement `IQueryable`.

---

**Answer: B**

---

### **Question: 22**

---

You are developing a Microsoft .NET 4 application. You need to ensure that security error trapping handles transparency violations. What should you do?

- A. Handle all thrown transparency violations explicitly.
- B. Handle only `SecurityAction.Demand` transparency violations.
- C. Handle only `SecurityAction.Assert` transparency violations.
- D. Handle only `SecurityAction.PermitOnly` transparency violations.

---

**Answer: A**

---

### **Question: 23**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a property named `ServiceContext` to a control. You need the value of `ServiceContext` to flow to the child controls exactly like the value of the `DataContext` property of the `FrameworkElement` class. What should you do?

- A. Inherit the control class from the `Dependency-Object` class.
- B. Register a dependency property.  
In the options settings of the property metadata, specify the `Inherits` option.
- C. Declare a new property.  
In the get and set methods of the new property, create an instance of the `TraversalRequest` class.
- D. Declare a new property.  
In the get method of the new property call `VisualTreeHelper.GetParent`.  
In the set method of the new property, call `VisualTreeHelper.GetChild`.

---

**Answer: C**

---

### **Question: 24**

---

You are developing a Windows Forms application that contains a `DataGridView` control. The `DataGridView` is composed of several fields that capture the customer's name, address, and phone number. You have been asked to provide data validation in a `DataGridView` to prevent users from leaving the name field if the name field is empty. You need to ensure that users cannot tab out of the name field without entering data. What should you do?

- A. Validate the name field in the `CellValidating` event. Set `e.Cancel = True` if the name field is empty.
- B. Validate the name field in the `CellErrorTextChanged` event. Get `e.RowIndex` if the name field is empty.
- C. Validate the name field in the `CellEnter` event. Set the focus on the name field if the name field is empty.
- D. Validate the name field in the `CancelRowEdit` event. Set the focus on the name field if the name field is empty.

---

**Answer: A**

---

### **Question: 25**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code fragment.

```
<Window x:Class="MyProject.MainWindow" xmlns:local="clr-namespace:MyProject">
 <Window.Resources>
 <local:AverageConverter x:Key="avgConverter" />
 </Window.Resources>
 <StackPanel Orientation="Vertical">
 <Slider x:Name="sld01" Minimum="0" Maximum="100" />
 <Slider x:Name="sld02" Minimum="0" Maximum="50" />
 <Slider x:Name="sld03" Minimum="0" Maximum="50" />
 <TextBlock>
 <TextBlock.Text>
 <MultiBinding Converter="{StaticResource avgConverter}">
 <Binding ElementName="sld01" Path="Value" />
 <Binding ElementName="sld02" Path="Value" />
 <Binding ElementName="sld03" Path="Value" />
 </MultiBinding>
 </TextBlock.Text>
 </TextBlock>
 </StackPanel>
</Window>
```

You need to implement the MyProject.MyConverter class. What should you do?

- A. Implement the IValueConverter interface.
- B. Implement the IMultiValueConverter interface.
- C. Inherit from the TypeConverter class.
- D. Apply the TypeConverterAttribute attribute.

---

**Answer: A**

---

### **Question: 26**

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a ListBox control to the application. The ListBox control is data-bound to an instance of a custom collection class of the Product objects named ProductList. The number of items of the data-bound collection is fixed. However, users can modify the properties of each of the Product objects in the collection. You need to ensure that changes made on the Product objects are automatically reflected in the ListBox control. What should you do?

- A. Implement the INotifyPropertyChanged interface in the Product class.
- B. Implement the INotifyCollectionChanged interface in the ProductList class.
- C. Set the Mode property of the Binding object of the ListBox control to TwoWay.
- D. Set the UpdateSourceTrigger property of the Binding object of the ListBox control to PropertyChanged.

---

**Answer: A**

---

### **Question: 27**

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains an ObservableCollection object named Pictures that contains several Picture objects. Each Picture object contains the Name and PictureFilePath properties. You add a ListBox control to the application. You need to ensure that the pictures are displayed in the ListBox control. Which code fragment should you use?

A. <ListBox ItemsSource="{Binding Source={StaticResource pictures}}"> <ListBox.ItemTemplate> <DataTemplate> <TextBlock> <TextBlock.Text> <Binding Path="PictureFilePath" /> </TextBlock.Text> </TextBlock> </DataTemplate> </ListBox.ItemTemplate> </ListBox>

B. <ListBox ItemsSource="{Binding Source={StaticResource pictures}}"> <ListBox.ItemTemplate> <DataTemplate> <Image Source="{Binding Source={StaticResource pictures}, Path=PictureFilePath}" /> </DataTemplate> </ListBox.ItemTemplate> </ListBox>

C. <ListBox ItemsSource="{Binding Source={StaticResource pictures}}"> <ListBox.ItemTemplate> <DataTemplate> <TextBlock> <TextBlock.Text> <Binding Path="Name" /> </TextBlock.Text> </TextBlock> </DataTemplate> </ListBox.ItemTemplate> </ListBox>

D. <ListBox ItemsSource="{Binding Source={StaticResource pictures}}"> <ListBox.ItemTemplate> <DataTemplate> <Image Source="{Binding Path PictureFilePath}" /> </DataTemplate> </ListBox.ItemTemplate> </ListBox>

---

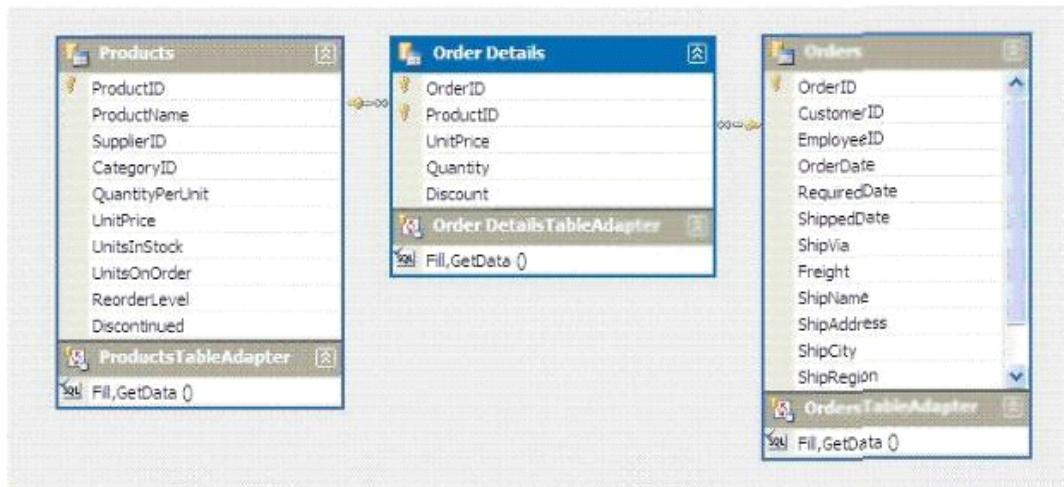
**Answer: D**

---

## Question: 28

---

You use Microsoft .NET Framework 4 to create a Windows Forms application. You have a dataset as shown in the following exhibit.



You plan to add a DataGridView to display the dataset.

You need to ensure that the DataGridView meets the following requirements:

- Shows Order Details for the selected order.
- Shows only Order Details for items that have UnitPrice greater than 20.
- Sorts Products by ProductName

Which code segment should you use?

- A. ordersBindingSource.DataSource = productsBindingSource  
ordersBindingSource.DataMember = "FK\_Order\_Details\_Products" productsBindingSource.Filter = "UnitPrice > 20"  
productsBindingSource.Sort = "ProductName"
- B. productsDataGridView.DataSource = ordersBindingSource  
productsBindingSource.Filter = "UnitPrice > 20"  
productsBindingSource.Sort = "ProductName"
- C. order\_DetailsBindingSource.DataSource = ordersBindingSource  
order\_DetailsBindingSource.DataMember = "FK\_Order\_Details\_Orders" order\_DetailsBindingSource.Filter = "UnitPrice > 20" productsBindingSource.Sort = "ProductName"
- D. order\_DetailsDataGridView.DataSource = ordersBindingSource order\_DetailsBindingSource.Filter = "UnitPrice > 20"  
productsBindingSource.Sort = "ProductName"

---

**Answer: C**

---

### **Question: 29**

---

You use Microsoft .NET Framework 4 to create a Windows Forms application. You add a new class named Customer to the application. You select the Customer class to create a new object data source. You add the following components to a Windows Form:

- A BindingSource component named customerBindingSource that is data-bound to the Customer object data source.
- A set of TextBox controls to display and edit the Customer object properties. Each TextBox control is data-bound to a property of the customerBindingSource component.
- An ErrorProvider component named errorProvider that validates the input values for each TextBox control.

You need to ensure that the input data for each TextBox control is automatically validated by using the ErrorProvider component. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Implement the validation rules inside the Validating event handler of each TextBox control by throwing an exception when the value is invalid.
- B. Implement the validation rules inside the TextChanged event handler of each TextBox control by throwing an exception when the value is invalid.
- C. Implement the validation rules inside the setter of each property of the Customer class by throwing an exception when the value is invalid.
- D. Add the following code segment to the InitializeComponent method of the Windows Form.

Me.errorProvider.DataSource = Me.customerBindingSource

- E. Add the following code segment to the InitializeComponent method of the Windows Form.

Me.errorProvider.DataSource = Me.customerBindingSource.DataSource Me.errorProvider.DataMember = Me.customerBindingSource.DataMember

---

**Answer: C, D**

---

### **Question: 30**

---

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application.

You write the following code fragment.

```
<TextBox Text="{Binding Path=StringMember} " />
```

You need to ensure that the StringMember property of the data-bound object is updated immediately when the user types in the TextBox control. Which binding expression should you use?

- A. {Binding Path=StringMember, Mode=Two way}
- B. {Binding Path=StringMember, NotifyOnSourceUpdated=True}
- C. {Binding Path=StringMember, NotifyOnTargetUpdated=True}
- D. {Binding Path=StringMember, UpdateSourceTrigger=PropertyChanged}

---

**Answer: D**

---

### Question: 31

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You plan to allow users to customize the background colors, foreground colors, and font style of the application. You also plan to add a TextBlock control to the application. You write the following code fragment. (Line numbers are included for reference only.)

```
01 <Window.Resources>
02 <src:ocColorSchemes x:Key="colorschemes"/>
03 <src:ocFonts x:Key="fonts" />
04 ...
05 <DataTemplate x:Key="StringTemplate"><TextBlock
06 Text="{Binding Path=.}" /></DataTemplate>
07 ...
08 <HierarchicalDataTemplate x:Key="ColorSchemeTemplate"
09 ItemsSource="{Binding Path=ocColors}"
10 ItemTemplate="{StaticResource
11 StringTemplate}"><TextBlock Text="{Binding
12 Path=.}" />
13 </HierarchicalDataTemplate>
14 </Window.Resources>
15
```

You need to ensure that the ContextMenu control is associated with the TextBlock control. You also need to ensure that the properties that can be customized are shown hierarchically. Which code fragment should you insert at line 15?

- A. < Grid >  
< Menu >  
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}"  
ItemsSource="{Binding Path=.}" ItemTemplate="{StaticResource StringTemplate}" />  
< MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource="{Binding Path=.}"  
ItemTemplate="{StaticResource StringTemplate}" />  
< /Menu >  
< TextBlock Width="200" Height="100" Background="LightBlue" />  
< /Grid >
- B. < Window.ContextMenu >  
< ContextMenu >  
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{Binding Path=.}"  
ItemTemplate="{StaticResource StringTemplate}" />

```
< MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource={Binding Path=.}>
ItemTemplate="{StaticResource StringTemplate}" />
</ContextMenu >
</Window.ContextMenu >
< Grid >
< TextBlock TJidht="200" Height= "100" Background="LightBlue" />
</Grid >
C. <Window. ContextMenu >
< ContextMenu >
< TextBlock Width="200" Height="100" Background="LightBlue" />
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{Binding Path*.}"
ItemTemplate="{StaticResource ColorSchemeTemplate}" />
< MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource="{Binding Path=.}"
ItemTemplate="{StaticResource StringTemplate}" >
</MenuItem >
< /ContextMenu >
</Window.ContextMenu >
D. < Grid >
< TextBlock Width="200" Height="100" Background="LightBlue" >
< TextBlock.ContextMenu >
< ContextMenu >
< MenuItem Header="Color Scheme" DataContext="{StaticResource colorschemes}" ItemsSource="{Binding Path=.}"
ItemTemplate="{StaticResource ColorSchemeTemplate}" />
< MenuItem Header="Font" DataContext="{StaticResource fonts}" ItemsSource="{Binding Path=.}"
ItemTemplate="{StaticResource StringTemplate}" ></MenuItem >
</ContextMenu >
< /TextBlock.ContextMenu >
< /TextBlock >
</Grid >
```

---

**Answer: D**

---

### **Question: 32**

---

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a ListBox control named lbxItems that is data-bound to a collection of objects. Each object has a DisplayName property. You add a Button control to the application. You need to ensure that the Content property of the Button control is data-bound to the DisplayName property of the selected item of lbxItems. Which binding expression should you use?

- A. { Binding ElementName= lbxItems, Source=SelectedItem, Path=DisplayName }
- B. { Binding Source=lbxItems, ElementName=SelectedItem, Path=DisplayName }
- C. { Binding ElementName=lbxItems, Path=SelectedItem.DisplayName }
- D. { Binding Source=lbxItems, Path=SelectedItem.DisplayName }

---

**Answer: C**

---

### **Question: 33**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You need to

ensure that users can view content in a book-reading format that displays two pages at a time. Which control should you use?

- A. FlowDocument
- B. FlowDocumentReader
- C. FlowDocumentPageViewer
- D. FlowDocumentScrollView

---

**Answer: B**

---

### **Question: 34**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a form named frmMain that contains a button named btnSave. You create a ProgressBar control named saveProgress. Initially, saveProgress is not displayed on frmMain. When a user clicks btnSave, you have the following requirements:

- saveProgress is slightly visible after 0.2 seconds
- saveProgress is fully visible after 1 second

You need to declare the corresponding storyboard.

You write the following code fragment. (Line numbers are included for reference only.)

```
01 <Storyboard x:Key="animateProgress" TargetName="saveProgress">
02
03 </Storyboard>
```

Which code fragment should you insert at line 02 to complete the declaration?

- A. <Object AnimationUsingKeyFrames Storyboard.TargetProperty= "Visibility"> <DiscreteObjectKeyFrame KeyTiroe="00:00:00" Value="{x:Static Visibility.Collapsed}" /> <DiscreteObjectKeyFrame KeyTiitie="00:00:01" Value="{x:Static Visibility.Visible}" /></Object AnimationUsingKeyFraities>
- B. <ObjectAnimationUsingKeyFrames Storyboard.TargetProperty="Visibility"> <DiscreteObjectKeyFraitie KeyTiine="0"  
KeyTiine="0" Value="{x:Static Visibility.Collapsed}" /> <DiscreteObjectKeyFrame KeyTirae="1"  
Value="{x:Static Visibility.Visible}" /></ObjectAniirationUsingKeyFrames>
- C. <DoubleAnimation Storyboard.TargetProperty="Opacity" Duration="00:00:01" From="0" To="1" />
- D. <DoubleAnimation Storyboard.TargetProperty= Opacity" Duration="1" From="0" To="1" />

---

**Answer: C**

---

### **Question: 35**

---

You use Microsoft .NET Framework 4 to create a custom Windows Presentation Foundation (WPF) application. Your environment includes several WPF applications. The applications use the same logo and style configuration as part of a corporate standard. You need to ensure that the existing applications can be updated to use the same logo and style settings without recompiling. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Mark the resource as an embedded resource in each application.
- B. Create a resource in an XAML file that contains the logo and style configurations.
- C. Create a resource in a custom control that contains the logo and style configurations.
- D. Add the resource as a ResourceDictionary in the MergedDictionaries collection of each application.
- E. Use ResourceManager to read the content of the resource. Manually assign the style configurations included in the

resource file to the appropriate control in each application.

---

**Answer: B, D**

---

**Question: 36**

---

You are developing a Windows Presentation Foundation (WPF) application. The application contains stylized body text and heading text. The heading text is a slight variation of the body text. You need to ensure that if the body text changes, the heading text automatically inherits those changes. What should you do?

- A. Set the Value property of the style setter to point to a static resource.
- B. Set the BasedOn property of the heading style to point to a static resource for the body text style.
- C. Set the Key property of the heading style to start with the name of the body text style.
- D. Set the TargetType property of the heading style to TextBlock.

---

**Answer: A**

---

**Question: 37**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a window as shown in the following exhibit.



You need to define a DockPanel control that fits the window. Which code fragment should you use?

- A. <DockPanel>  
<Button Content="Left"/>  
<Button Content="Top" DockPanel.Dock="Top">  
<Button Content="Bottom" DockPanel.Dock="Bottom"/>  
<Button Content="Center"/>  
</DockPanel>
- B. <DockPanel>  
<Button Content="Top" DockPanel.Dock="Top"/>  
<Button Content="Bottom" DockPanel.Dock="Bottom"/>  
<Button Content="Left"/>  
<Button Content="Center"/>  
</DockPanel>

C. <DockPanel>  
<Button Content="Leftp7">  
<Button Content="Top" DockPanel.Dock="Top"/>  
<Button Content="Center">  
<Button Content="Bottom" DockPanel.Dock="Bottom">  
</DockPanel>  
D. <DockPanel>  
<Button Content="Top" DockPanel.Dock="Top"/>  
<Button Content="Left"/>  
<Button Content="Center'7>  
<Button Content="Bottoiti" DockPanel.Dock="Bottoinr7>  
</DockPanel>

---

**Answer: B**

---

### **Question: 38**

---

You are developing a Windows Presentation Foundation (WPF) application. All of the application styles are in a file named Themes.dll. You have the following markup segment.

```
<Border Style="{StaticResource BlueBackground}" Height="100" Width="200">
</Border>
```

BlueBackground is defined in a XAML file named BlueTheme.xaml. The XAML markup is compiled into the Themes.dll file. You need to ensure that the XAML file is referenced so that the application can apply the settings in the BlueBackground style. What should you do?

A. Add the following line to Window.Resources.

```
<ResourceDictionary
Source="/Themes;component/BlueTheme.xaml" />
```

B. Add the following line to Window.Resources.

```
<ResourceDictionary
Source="pack://application:,,,/Themes;BlueTheme.xaml" />
```

C. Add the following line to Border.Resources.

```
<ResourceDictionary
Source="/Themes;component/BlueTheme.xaml" />
```

D. Add the following line to Border.Resources.

```
<ResourceDictionary
Source="pack://application:,,,/Themes;BlueTheme.xaml" />
```

---

**Answer: A**

---

### **Question: 39**

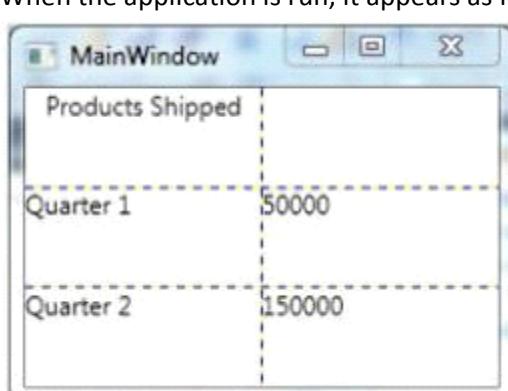
---

You are developing a Windows Presentation Foundation (WPF) application. The main window of the application is defined by the following markup.

```
<Grid ShowGridLines="True">
<Grid.ColumnDefinitions>
<ColumnDefinition />
<ColumnDefinition />
</Grid.ColumnDefinitions>
<Grid.RowDefinitions>
```

```
<RowDefinition />
<RowDefinition />
<RowDefinition />
</Grid.RouDefinitions>
<TextBlock Grid.Row="0" HorizontalAlignment="Center">
Products Shipped</TextBlock>
<TextBlock Grid.Row="1" Grid.Column="0">
Quarter K</TextBlock>
<TextBlock Grid.Row="2" Grid.Column="0">
Quarter 2</TextBlock>
<TextBlock Grid.Row="!" Grid.Column="1">
50000</TextBlock>
<TextBlock Grid.Row="2" Grid.Column="1">
150000</TextBlock>
</Grid>
```

When the application is run, it appears as follows.



You need to ensure that the TextBlock control with the contents "Products Shipped" is horizontally centered on the Grid control. Which markup segment should you add to the TextBlock control?

- A. GridVleu.ColumnCollection="1, 2"
- B. Grid.ColumnSpan="2"
- C. Manipulation. ManipulationParaxneter"2"
- D. TextBlock.TextAlignment="Center"

---

**Answer: B**

---

### **Question: 40**

You are developing a Windows Presentation Foundation (WPF) application for a travel reservation system. You need to ensure that users can select a range of travel dates. What should you do?

- A. Add a single DatePicker control to the design surface.
- B. Add a single Calendar control to the design surface.
- C. Add a single MediaElement control to the design surface to display a calendar.
- D. Add the appropriate Windows Forms references to the project references. Add a single Windows Forms DateTimePicker control to the design surface.

---

**Answer: B**

---

### **Question: 41**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains the following code fragment.

```
<StackPanel>
<TextBlock Style="{StaticResource MyStyle}">Hello World</TextBlock>
<Button Style="{StaticResource MyStyle}">Ok</Button> </StackPanel>
```

You need to define a style that applies the following properties to the text in the StackPanel object:

- FontSize = 32
- FontWeight = Bold

Which code fragment should you use?

- A. <Style x:Key="MyStyle" TargetType="{x:Type Control}">  
<Setter Property="TextElement.FontSize" Value="32" />  
<Setter Property="TextElement.FontWeight" Value="Bold" />  
</Style>
- B. <Style x:Key="MyStyle" TargetType="{x:Type Framework-Element}">  
<Setter Property="TextElement.FontSize" Value="32" />  
<Setter Property="TextElement.FontWeight" Value="Bold" />  
</Style>
- C. <Style x:Key="MyStyle" TargetType="{x:Type TextElement}">  
<Setter Property="Control.FontSize" Value="32" />  
<Setter Property="Control.FontWeight" Value="Bold" />  
</Style>
- D. <Style x:Key="MyStyle" TargetType="{x:Type UserControl}">  
<Setter Property="Control.FontSize" Value="32" />  
<Setter Property="Control.FontWeight" Value="Bold" />  
</Style>

---

**Answer: B**

---

---

### **Question: 42**

---

You are developing a Windows Presentation Foundation (WPF) application. You need to use XAML to create a custom control that contains two Button controls. From which base class should you inherit?

- A. FrameworkElement  
B. UIElement  
C. UserControl  
D. Button

---

**Answer: C**

---

---

### **Question: 43**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You create a Button control for the application. You need to ensure that the application meets the following requirements:

- When the mouse pointer is over the Button control, the background color of the button is set to red and the Button control appears bigger.
- When the mouse pointer is not over the Button control, the button returns to its original state.

What should you do?

- A. Create a template. Declare a VisualState element in the template.
- B. Create a StoryBoard animation. Add an EventTrigger class to the Button control that begins the StoryBoard animation.
- C. Create a ScaleTransform class. Bind the ScaleX and ScaleY properties of the Button control to the Background property by using a custom value converter.
- D. Add a method named ChangeAppearance in the code-behind file. Subscribe the ChangeAppearance method to the MouseEnter event of the Button control,

---

**Answer: A**

---

### **Question: 44**

---

You are developing a Windows Presentation Foundation (WPF) application. The application contains the following code in the code-behind file for an application window. (Line numbers are included for reference only.)

```
01 Dim stack As StackPanel = New StackPanel()
02 Content = stack
03 For i As Integer = 0 To 9
04 Dim btn As Button = New Button()
05 btn.Name = Convert.ToChar (Asc("A") + i).ToString()
06 btn.Content - btn.Name "says" "Click me1" 07
08 Next
```

You need to ensure that all of the Button controls that are defined in this code segment appear in the application window. Which code segment should you insert at line 07?

- A. stack.Children.Add (btn)
- B. stack.Children.Insert (i + 1, btn)
- C. Content = btn
- D. Content = New Button()  
With {Name = (Asc("A") + i).ToString(), .  
Content = (i & " says Click me").ToString()}

---

**Answer: A**

---

### **Question: 45**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application contains a set of Button controls. You need to ensure that any button that contains no content is highlighted when the mouse pointer is located over it. Which code fragment should you use?

```
A. <Style TargetType="{x:Type Button}">
<Setter Property="Background" Value="Yellow" />
<Style.Triggers>
<MultiTrigger>
<MultiTrigger.Conditions>
<Condition Property="IsMouseOver, Value="True" />
<Condition Property="Content" Value="{x:Null}" />
</MultiTrigger.Conditions>
</MultiTrigger>
```

```
</Style.Triggers>
</Style>
B. <Style TargetType="{x:Type Button}">
<Style.Triggers>
<Trigger Property="IsMouseOver" Value="True">
<Setter Property="Background" Value="Yellow" />
</Trigger>
<Trigger Property="Content" Value="{x:Null}">
<Setter Property="Background" Value="Yellow" />
</Trigger>
</Style.Triggers>
</Style.Triggers>
</Style>
C. <Style TargetType="{x:Type Button}">
<Setter Property="Background" Value="Yellow" />
<Style.Triggers>
<MultiTrigger>
<MultiTrigger.Conditions>
<Condition Property="IsMouseOver" Value="True" />
<Condition Property="Content" Value="Empty" />
</MultiTrigger.Conditions>
</MultiTrigger>
</Style.Triggers>
</Style>
D. <Style TargetType="{x:Type Button}">
<Style.Triggers>
<Trigger Property="IsMouseOver" Value="True">
<Setter Property="Background" Value="Yellow" />
</Trigger>
<Trigger Property="Content" Value="Empty">
<Setter Property="Background" Value="Yellow" />
</Trigger>
</Style.Triggers>
</Style>
```

---

**Answer: A**

---

### **Question: 46**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application has multiple data entry windows. Each window contains controls that allow the user to type different addresses for shipping and mailing. All addresses have the same format. You need to ensure that you can reuse the controls. What should you create?

- A. a user control
- B. a data template
- C. a control template
- D. a control that inherits the Canvas class

---

**Answer: A**

---

---

### **Question: 47**

---

You are developing a Windows Presentation Foundation (WPF) application to play audio files. You add a MediaElement control named mediaElement1 and a Button control named btnPlayAudio to the design surface. The MediaElement control Source attribute is set to an audio file. The LoadedBehavior attribute is set to Manual.

You add the following code to the main window.

```
Sub playCoinroand_Executed (ByVal sender As Object,
ByVal e As RoutedEventArgs)
MediaElenient 1.Play ()
End Sub
```

You set the command of the button to MediaCommands.Play. You need to ensure that the application will play the audio file when the button is pressed. What should you add to the constructor of the main window?

- A. Dim playCommand As RoutedCommand = New RoutedCommand()  
AddHandler playCommand.CanExecuteChanged,  
New EventHandler(AddressOf playComrnand\_Executed)  
Me.CommandBindings.Add(New CoinmandBinding (playCommand))
- B. Dim playCommand As RoutedUICommand = New RoutedUICommand()  
AddHandler playCommand.CanExecuteChanged,  
New EventHandler(AddressOf playCommand\_Executed) Me . CommandBindings .  
Add (New CommandBinding (playCommand) )
- C. Dim playCommand As CoinmandBinding =  
New CommandBinding(MediaCommands.Play)  
AddHandler playCommand.CanExecute,  
New CanExecuteRoutedEventHandler(  
AddressOf playCommand\_Executed)  
Me.CommandBindings.Add(playCommand)
- D. Dim playCommand As CoinmandBinding =  
New CoinmandBinding (MediaCommands.Play)  
AddHandler playCommand.Executed,  
New ExecutedRoutedEventHandler(  
AddressOf playCommand\_Executed)  
Me.CommandBindings.Add(playCommand)

---

**Answer: D**

---

---

### **Question: 48**

---

You are developing a Windows Presentation Foundation (WPF) application. An event triggers a workflow such that a parent control executes the event handlers before the child controls. You need to ensure that if a parent control's event handler encounters an error, the subsequent handlers are not called. What should you do?

- A. Use handlers for a tunneling routed event and mark the event as handled in the case of a problem.
- B. Use handlers for a tunneling routed event and mark the event as handled in the Finally portion of a Try-Catch-Finally code block.
- C. Use handlers for a bubbling routed event and mark the event as handled in the case of a problem.
- D. Use handlers for a bubbling routed event and set the Handled property of the RoutedEventArgs object to True in the Catch portion of a Try-Catch-Finally code block.

---

**Answer: D**

---

### **Question: 49**

You use Microsoft .NET Framework to create a Windows Presentation Foundation (WPF) application. You create a window that contains a Button control and a MenuItem control. Both controls are labeled "Add sugar." The Command properties of the Button and MenuItem controls are set to the same RoutedCommand named AddSugarCommand. You write the following code segment.

```
Private Sub CanAddSugar(sender As Object, e As CanExecuteRoutedEventArgs)
```

```
...
```

```
End Sub
```

You need to ensure that when the CanAddSugar method sets e.CanExecute to false, the MenuItem and Button controls are disabled.

What should you do?

- A. Create an event handler for the CanExecuteChanged event of the AddSugarCommand command. Call the CanAddSugar method from within the event handler.
- B. Inherit the AddSugarCommand from the RoutedUICommand class instead of the RoutedCommand class. Call the CanAddSugar method from within the constructor of the AddSugarCommand command.
- C. Add a CommandBinding object to the CommandBinding property of the MenuItem control. Set the CanExecute property of the CommandBinding object to the CanAddSugar method.
- D. Add a CommandBinding object to the CommandBindings property of the window. Set the Command property of CommandBinding to the AddSugarCommand command. Set the CanExecute property of the CommandBinding object to the CanAddSugar method.

---

**Answer: D**

---

### **Question: 50**

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application.

You write the following code fragment. (Line numbers are included for reference only)

```
01 <Page xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
02 xmlns:x ="http://schemas.microsoft.com/winfx/2006/xaml"
03 x:Class =" MyCompany.MediaControls " >
04 < StackPanel Background="Black">
05 < StackPanel HorizontalAlignment ="Center" Width="450" Orientation="Horizontal">
06
07 <!-- Play button. -->
08 <Image Source="images\ UI_play.gif " MouseDown =" OnMouseDownPlayMedia " Margin="5" />
09 <!-- Pause button. -->
10 <Image Source="images\ UI_pause.gif " MouseDown =" OnMouseDownPauseMedia " Margin="5" />
11 <!-- Stop button. -->
12 <Image Source="images\ UI_stop.gif " MouseDown =" OnMouseDownStopMedia " Margin="5" />
13 </ StackPanel >
14 </ StackPanel >
15 </Page>
```

You need to ensure that a video file begins to play only when a user clicks Play. Which code fragment should you insert at line 06?

- A. < MediaElement Source="media\ numbers.wmv " Name=" myMediaElement " Width="450" Height="250" LoadedBehavior ="Play" UnloadedBehavior ="Stop" Stretch='Till,,/>
- B. < MediaElement Source="media\ numbers.wmv " Name=" myMediaElement "

Width="450" Height="250" LoadedBehavior ="Manual" UnloadedBehavior ="Stop" Stretch="Fill"/>  
C. < MediaPlayer Source="media\ numbers.wmv " Name=" myMediaElement "  
Width=f450" Height="250" LoadedBehavior ="Play" UnloadedBehavior ="Stop" Stretch="FillM"/>  
D. < MediaPlayer Source="media\ numbers.wmv " Name=" myMediaElement "  
Width="450" Height="250" LoadedBehavior ="Manual" UnloadedBehavior ="Stop" Stretch="Fill"/>

---

**Answer: B**

---

### **Question: 51**

You are developing a Windows Presentation Foundation (WPF) application. You configure PresentationTraceSource to track errors in a bound TextBox control in the application. You need to choose the window that the Trace Information is sent to. Which Visual Studio window should you select?

- A. Autos
- B. Immediate
- C. Locals
- D. Output

---

**Answer: D**

---

### **Question: 52**

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You discover that when the application runs, a user control is not rendered correctly. You need to find out the user interface (UI) element of the window that is causing the rendering problem. What should you do?

- A. Use the Local Window.
- B. Use the WPF Visualizer.
- C. Generate a trace log by using IntelliTrace.
- D. Set a breakpoint at the control. Run the application.

---

**Answer: A**

---

### **Question: 53**

You create a Microsoft Windows Installer file for a Windows Presentation Foundation (WPF) application that requires Microsoft .NET Framework 4. You need to ensure that the installation starts only if .NET Framework 4 is already installed on the computer. What should you do?

- A. Use a custom action.
- B. Set the MinVersion property to .NET Framework 4.
- C. Set the Version property of Windows Installer to .NET Framework 4.
- D. Set the Version property of the Launch Condition to .NET Framework 4.

---

**Answer: D**

---

### **Question: 54**

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You use the ClickOnce deployment methodology to distribute the application. You need to store application-specific data along with read/write permissions without requiring elevated permissions for the application. Where should you store the application data?

- A. In isolated storage
- B. On the database server
- C. In the ClickOnce data directory
- D. in the App.config file of the application

---

**Answer: A**

---

### **Question: 55**

---

You are developing a Windows Presentation Foundation (WPF) application. You are implementing a test strategy for the application. You need to ensure that the test class can repeat user input. From which base class should the test class inherit?

- A. AutomationElementIdentifier
- B. AutomationPeer
- C. Keyboard
- D. UICTypes

---

**Answer: B**

---

### **Question: 56**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application named MyApp.exe. You use Microsoft Windows Installer to package the application. You create an icon file named Application.ico. You need to associate Application.ico with MyApp.exe when MyApp.exe is deployed. What should you do?

- A. Use the File Types Editor tool.
- B. Rename the icon file to MyApp.exe.ico.
- C. Set the AddRemoveProgramsIcon property to Application.ico.
- D. Use the File System Editor tool to set the Icon property to Application.ico.

---

**Answer: D**

---

### **Question: 57**

---

You are developing a Windows Presentation Foundation (WPF) application with the following class. (Line numbers are included for reference only.)

```
01 Public Class DisplayData
02 Implements INotifyPropertyChanged
03
04 Public Event PropertyChanged(ByVal sender As Object,
05 ByVal e As PropertyChangedEventArgs)
06 Implements INotifyPropertyChanged.PropertyChanged
07
08 Private _Data As String
```

```

10 Public Property Data As String
11 Get
12 Return _Data
13 End Get
14 Set (ByVal value As String) 15
15 _Data = value 17
16 End Set
17 End Property 20
18 Private Sub NotifyPropertyChanged(
19 ByVal Info As String) 23
20 RaiseEvent PropertyChanged(
21 New PropertyChangedEventArgs(Info)) 26
22 End Sub
23
24 End Class

```

The UI is not being updated when the Data property is set.

You need to ensure that the DisplayData class correctly updates the UI when the Data property is set.

What should you do?

A. Insert the following code at line 15.

Not ifyPropertyChanged("Data")

B. Insert the following code at line 17.

NotifyPropertyChanged("Data")

C. Insert the following code at line 15.

NotifyPropertyChanged(value)

D. insert the following line at line 17.

NotifyPropertyChanged(value)

---

**Answer: C**

---

## Question: 58

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a TreeView control to show the hierarchical structure of orders and order details. Each order contains an ObservableCollection named OrderDetails.

You write the following code fragment. (Line numbers are included for reference only.)

```

01 <Grid>
02 <Grid.Resources>
03 <src:Orders x:Keys="orders"/>
04 <DataTemplate x:Key="OrderDetailTemplate">
05 <TextBlock Text="{Binding Path=.}" />
06 </DataTemplate> 07
07 </Grid.Resources>
08 <TreeView DataContext="{StaticResource orders}"
09 ItemsSource="{Binding Path= . }"
10 ItemTemplate="{StaticResource OrderTeroplate}"/>
11 </Grid>

```

You need to ensure that the TreeView control meets the following requirements:

- Each order is shown as a TreeView node.
- The order nodes have order detail nodes as children.
- The order detail nodes have no children.

Which code fragment should you insert at line 07?

- A. <HierarchicalDataTemplate      x:Key="OrderTemplate"      DataType="Order"   ItemTemplate="{StaticResource OrderDetailTemplate} ">  
<TextBlock Text="{Binding Path=.}" />  
</HierarchicalDataTemplate>
- B. <HierarchicalDataTemplate x:Key="OrderTemplate"  
ItemsSource="{Binding Path=OrderDetails}"  
ItemTemplate="{StaticResource OrderDetailTemplate}">  
<TextBlock Text="{Binding Path=.}" /> </HierarchicalDataTemplate>
- C. <HierarchicalDataTemplate x : Key== "Order Temp late"  
ItemTemplate="{Binding Path=orders}">  
ItemTemplate="{StaticResource OrderDetailTemplate}">  
<TextBlock Text="{Binding Path=.}" />  
</HierarchicalDataTemplate>
- D. <HierarchicalDataTemplate x:Key="OrderTemplate"  
ItemsSource="{Binding Path=orders}"   DataType="Order">  
<TextBlock Text="{Binding Path=.}" />  
</HierarchicalDataTemplate>

---

**Answer: B**

---

---

### **Question: 59**

---

You are developing a Windows Presentation Foundation (WPF) application that displays opportunities from List (Of T) named Leads, where T is a class named Lead. The Lead class contains the properties Title and Revenue. You add a DataGrid control named dgQualifiedLeads to the MainWindow.xaml file. You set the ItemSource property of dgQualifiedLeads to Leads as follows. (Line numbers are included for reference only.)

```

01 Dim Leads As ICollectionView
02 Public Sub New()
03
04 InitializeComponent()
05 Leads = CollectionViewSource.GetDefaultView(
06 New List(Of Lead)(
07 New Lead() {
08 New Lead() With {
09 .Title = "Title1", .Revenue = 1250.78}, _
10 New Lead() With {
11 .Title = "Title2", .Revenue = 500.0}, _
12 New Lead() With {
13 .Title = "Title3", .Revenue = 2300.33}, _
14 New Lead() With {
15 .Title = "Title4", .Revenue = 2989.09}, _
16 New Lead() With {
17 .Title = "Title5", .Revenue = 1500.21} _
18 }
19 }
20)
21 dgQualifiedLeads.ItemsSource = Leads
22
23 End Sub

```

You need to ensure that CollectionViewSource is used to filter the list to display only Lead objects with revenue of more than \$1,000. What should you do?

A. Insert the following code at line 22.

```
Leads.Filter = New Predicate(Of Object)(AddressOf FilterOut)
```

Add the following code segment to the code-behind of the MainWindow.xaml file.

```
Public Function FilterOut(ByVal item As Object) As Boolean
```

```
Dim lead As Lead = TryCast(item, Lead)
```

```
Return IIf(lead.Revenue < 1000D, True, False)
```

```
End Function
```

B. Insert the following code at line 22.

```
Leads.Filter =
```

```
New Predicate(Of Object)(AddressOf FilterOut)
```

Add the following code segment to the code-behind of the MainWindow.xaml file.

```
Public Function FilterOut(ByVal item As Object) As Boolean
```

```
Dim lead As Lead = TryCast(item, Lead)
```

```
Return IIf(lead.Revenue > 1000D, False, True)
```

```
End Function
```

C. Insert the following code at line 22.

```
Leads.Filter =
```

```
New Predicate(Of Object)(
```

```
Function(s) DirectCast(s. Lead).Revenue > 1000D)
```

D. Insert the following code at line 22.

```
Leads.SortDescriptions.Add(New SortDescription(
 "Revenue", ListSortDirection.Ascending))
```

---

Answer: C

---

---

## Question: 60

---

You are developing a Windows Presentation Foundation (WPF) application that displays pricing and inventory information. A list box's ItemsSource property has decimal and string types. Decimals represent price and strings represent messages such as "Discontinued".

The following markup is defined as follows. (Line numbers are included for reference only.)

```
01 <Window ...
02 xmlns:clr="clr-namespace:System;assembly=mscorlib">
03 -cListBox ItemsSource="{ Binding } ">
04 -CListBox. Resources> 05
05 </ListBox.Resources>
06 </ListBox>
07 </Window>
```

You need to ensure that data templates are used to format the strings without changes and the decimals as currency. Which markup segment should you insert at line 05?

- A. <DataTemplate x:Key="clr:String">  
<TextBlock  
Text="{Binding StringFormat=Itein Error: {0}}"/>  
</DacaTeroplate>  
<DataTeroplate x:Key="clr:Decirrtal">  
<TextBlock  
Text="{Binding StringForroat=Item Price: {0:C}}" />  
</DataTemplate>
- B. <DataTemplate x:Key="String" Template="clr:String">  
<TextBlock  
Text="{Binding StringFormat=Item Error: {0}}" />  
</DataTemplate>  
<DataTemplate x:Key="Decimal" Template="clr:Decimal ">  
<TextBlock  
Text="{Binding StringFormat=Item Price: {0:C}}" />  
</DataTemplate>
- C. <DataTemplate DataType="{x:Type clr:String} ,>  
<TextBlock  
Text="{ Binding StringFormat=Item Error: {0}}" />  
</DataTemplate>  
<DataTemplate DataType="{x:Type clr:Decimal} ">  
<TextBlock  
Text="{Binding StringFormat=Item Price: {0:C}}" />  
</DataTemplate>
- D. <DataTemplate DataType="clr : String">  
<TextBlock  
Text="{Binding StringFormat=Item Error: {0}}" />  
</DataTemplate>  
<DataTernplate DataType="clr: Decimal">  
<TextBlock  
Text="{Binding StringFormat=Item Price: {0: C}}" />  
</DataTemplate>

---

Answer: B

---

---

### **Question: 61**

---

You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You create a WPF window in the application. You add the following code segment to the application.

```
Public Class ViewModel
 Public Property Data() As CollectionView
 Get
 End Get
 Set
 End Set
 End Property
End Class

Public Class BusinessObject
 Public Property Name() As String
 Get
 End Get
 Set
 End Set
 End Property
End Class
```

The DataContext property of the window is set to an instance of the ViewModel class. The Data property of the ViewModel instance is initialized with a collection of BusinessObject objects. You add a TextBox control to the window. The DataContext property of the window is set to an instance of the ViewModel class. The Data property of the ViewModel instance is initialized with a collection of BusinessObject objects. You add a TextBox control to the window. You need to bind the Text property of the TextBox control to the Name property of the current item of the CollectionView of the DataContext object. You also need to ensure that when a binding error occurs, the Text property of the TextBox control is set to N/A. Which binding expression should you use?

- A. {Binding Path=Data/Name, FallbackValue='N/A' }
- B. {Binding Path=Data.Name, FallbackValue='N/A' }
- C. {Binding Path=Data/Name, TargetNullValue='N/A1' }
- D. {Binding Path=Data.Name/ TargetNullValue=' N/A1' }

---

**Answer: A**

---

---

### **Question: 62**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You write the following code segment. (Line numbers are included for reference only.)

```
01 Public Class Contact
02 Private _contactName As String
03
04 Public Property ContactName() As String
05 Get
06 Return _contactName
07 End Get
08 Set
09 _contactName = value
10 End Set
```

11 End Property

12

13 End Class

You add the following code fragment within a WPF window control.

```
< TextBox >
< TextBox.Text >
< Binding Path="ContactName" UpdateSourceTrigger="PropertyChanged">
< Binding.ValidationRules >
< DataErrorValidationRule />
< /Binding.ValidationRules >
< /Binding >
< /TextBox.Text > </TextBox >
```

You need to ensure that the Contact class contains a business rule to ensure that the ContactName property is not empty or NULL. You also need to ensure that the TextBox control validates the input data. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two).

A. Replace line 01 with the following code segment.

```
Public Class Contact
Implements IDataErrorInfo
```

B. Replace line 01 with the following code segment.

```
Public Class Contact
Inherits ValidationRule
```

C. Replace line 01 with the following code segment.

```
Public Class Contact
Implements INotifyPropertyChanging
```

D. Add the following code segment at line 03.

```
Public Event PropertyChanged As PropertyChangedEventHandler
```

Modify line 08 with the following code segment:

Set

```
If Me.PropertyChanged <> Nothing Then
```

```
PropertyChanging(Me, New PropertyChangedEventArgs("ContactName")) End If
```

```
If String.IsNullOrEmpty(value) Then
```

```
Throw New ApplicationException("Contact name is required") End If
```

```
contactName = value
```

End Set

E. Add the following code segment at line 12.

```
Public Readonly Property [Error] ()
```

```
As String
```

Get

```
Throw New Exception("string.Empty")
```

```
End Get End Property
```

```
Public Default Readonly Property Item(columnName As String) As String Get
```

```
If columnName = "ContactName" AndAlso String.IsNullOrEmpty(Me.ContactName) Then
```

```
Return "Contact name is required"
```

```
End If
```

```
Return Nothing
```

```
End Get
```

```
End Property
```

---

**Answer: A, E**

---

---

### **Question: 63**

---

You are developing a Windows Presentation Foundation (WPF) application. This application will be used to display customer data to customer service representatives. Phone numbers are stored as ten-digit numbers in the database. The markup is as follows.

```
<TextBlock Text="{Binding Path=PhoneNumber,
ConvertersStaticResource PhoneFormatConverter}" />
```

You need to ensure that phone numbers are displayed in the following format: (###) ### - ####

Which markup segment should you use?

- A. Public Function Convert(  
    ByVal value As Object, ByVal targetType As Type,  
    ByVal parameter As Object, ByVal culture As CultureInfo)  
    As Object  
    Return String.Format("{0:(###)###-####}",  
        CLng(parameter))  
    End Function
- B. Public Function Convert(  
    ByVal value As Object, ByVal targetType As Type,  
    ByVal parameter As Object, ByVal culture As CultureInfo)  
    As Object  
    Return String.Format("{0:(###)###-####}",  
        CLng(value))  
    End Function
- C. Public Function ConvertBack()  
    ByVal value As Object, ByVal targetType As Type,  
    ByVal parameter As Object, ByVal culture As CultureInfo)  
    As Object  
    Return String.Format("{0:[###]###-####}",  
        CLng(parameter))  
    End Function
- D. Public Function ConvertBack(  
    ByVal value As Object, ByVal targetType As Type,  
    ByVal parameter As Object, ByVal culture As CultureInfo)  
    As Object  
    Return String.Format("{0: (###)###-####}",  
        CLng(value))  
    End Function

---

**Answer: B**

---

---

### **Question: 64**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You add a ListBox control to the application. The ListBox control is data-bound to an instance of a custom collection class of the Product objects named ProductList. You need to ensure that changes to ProductList are automatically reflected in the ListBox control. What should you do?

- A. Implement the INotifyPropertyChanged interface in the Product class.
- B. Implement the IQueryable<Product> interface in the ProductList class.

- C. Extend the DependencyObject class in the Product class.
- D. Extend the ObservableCollection<Product> class in the ProductList class.

---

**Answer: D**

---

### **Question: 65**

You are developing a Windows Presentation Foundation (WPF) application. You need to display HTML content from a Web page on the WPF form. What should you do?

- A. Add a FlowDocumentReader control to the design surface. Then create a FlowDocument control.
- B. Add a DocumentViewer control to the design surface. Then create a FixedDocument control.
- C. Add a WebBrowser control to the design surface. Then use the Navigate method to navigate the URI object.
- D. Add a ContentControl control to the design surface. Then reference a WebClient object to return an HTML string.

---

**Answer: C**

---

### **Question: 66**

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You need to ensure that the application meets the following requirements:

- Displays a menu that is specific to the control selected by the user.
- Displays the menu next to the control.

Which control should you use?

- A. Menu
- B. Popup
- C. ListBox
- D. ContextMenu

---

**Answer: D**

---

### **Question: 67**

You use Microsoft .NET Framework 4 to create a Windows Forms application. You need to allow the user interface to use the currently configured culture settings in the Control Panel. Which code segment should you use?

- A. Thread.CurrentThread.CurrentCulture = Thread.CurrentThread.CurrentCulture
- B. Thread.CurrentThread.CurrentCulture = Thread.CurrentThread.CurrentCulture
- C. Thread.CurrentThread.CurrentCulture = CultureInfo.InstalledUICulture
- D. Thread.CurrentThread.CurrentCulture = CultureInfo.InstalledUICulture

---

**Answer: A**

---

### **Question: 68**

You are developing a Windows Presentation Foundation (WPF) application. You are implementing the security features for a function that requires File 10. The callers of this function that are higher in the stack do not have permission to read the C:\temp directory. The function also accesses other resources that require permission. You

need to ensure that the function has the proper permissions to read the C:\temp directory, and that all other resources in the function can still be accessed. Which attribute should you include with the function?

- A. <FileIOPermissionAttribute (SecurityAction.Demand, Read:="C:\TEHP")>
- B. <FileIOPermissionAttribute(SecurityAction.Assert, Read:="C:\TEMP")>
- C. <FileIOPermissionAttribute(SecurityAction.PermitOnly, Read:="C:\TEMP")>
- D. <FileIOPermissionAttribute(SecurityAction.InheritanceDemand, Read:="C:\TEMP")>

---

**Answer: B**

---

### **Question: 69**

---

You use Microsoft .NET Framework 4 to create a Windows Forms application. You write the following code segment. (Line numbers are included for reference only.)

```
01 NotInheritable Class FormSettings
02 Inherits ApplicationSettingsBase 03
04 Public Property Description() As [String]
05 Get
06 Return DirectCast(He("Description"), [String])
07 End Get
08 Set
09 Me("Description") -value
10 End Set
11 End Property
12 End Class
```

You need to ensure that the first time each user opens the application, a text field displays the following message: "Please enter your setting." Which code segment should you insert at line 03?

- A. <UserScopedSetting()>  
<DefaultValue("Please enter your setting.")>
- B. <UserScopedSetting()>  
<SettingsDescription("Description: Please enter your setting.")>
- C. <ApplicationScopedSetting()>  
<DefaultValue("Please enter your setting.")>
- D. <ApplicationScopedSetting()>  
<SettingsDescription("Description: Please enter your setting.")>

---

**Answer: A**

---

### **Question: 70**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. You create a custom control named Wheel. You need to ensure that the Speed property of Wheel can be animated. What should you do?

- A. Inherit the DependencyObject class.

- B. Declare the Speed property as a dependency property.
- C. Declare an animation of the Speed property from within the code-behind file.
- D. Implement the System.Windows.Media.Animation.IAnimatable interface with the Wheel class.

---

**Answer: B**

---

### **Question: 71**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application uses the drag-and-drop functionality. You need to ensure that the drag-and-drop operation is stopped when a user moves the cursor outside the boundaries of the application form. Which enumeration member should you use?

- A. DragAction.Cancel
- B. DragAction.Drop
- C. DragDropEffects.None
- D. DragDropEffects.All

---

**Answer: A**

---

### **Question: 72**

---

You use Microsoft .NET Framework 4 to create a Windows Presentation Foundation (WPF) application. The application uses the background worker process (BWP). When the user clicks a button, the background worker executes a method named DoCalculations asynchronously. You need to implement a progress bar on the user interface (UI) that informs the user of the progress of DoCalculations. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Modify the Value property of the progress bar in DoCalculations.
- B. Modify the Value property of the progress bar in the ProgressChanged event handler of the background worker.
- C. Modify the Value property of the progress bar in the RunWorkerCompleted event handler of the background worker.
- D. Call the ReportProgress method of the background worker in DoCalculations.
- E. Call the ReportProgress method of the background worker in the DoWork event handler of the background worker.

---

**Answer: B, D**

---

### **Question: 73**

---

You are developing a Windows Presentation Foundation (WPF) application to display service cases by category in a ListBox. You create a class named Case with the properties Description and Category, as follows.

```
public class Case
{
 public string Description { get; set; }
 public string Category { get; set; }
}

public class ServiceCases : ObservableCollection<Case>
{
 ...
}
```

The MainWindow.xaml contains the following markup segment.

```
<DockPanel>
 <ListBox Name="lstService">

 </ListBox>
</DockPanel>
```

You bind to the lstService control a static resource named ServiceCases. You need to ensure that the service cases are grouped by category. What should you do in the MainWindow.xaml file?

- A. Add the following markup segment to ListBox.Binding.

```
<ListBox.BindingGroup>
<BindingGroup Name="Category"/>
</ListBox.BindingGroup>
```

- B. Add the following markup segment to DockPanel.Binding.

```
<DockPanel.BindingGroup>
<BindingGroup Name="Category"/>
</DockPanel.BindingGroup>
```

- C. Add the following markup segment to CollectionViewSource.

```
<CollectionViewSource.GroupDescriptions>
<dataPropertyGroupDescription PropertyName="Category"/> </CollectionViewSource.GroupDescripcion">
```

- D. Add the following markup segment to CollectionViewSource. <CollectionViewSource.GroupDescriptions/>

---

**Answer: A**

---

### Question: 74

---

You are developing a Windows Presentation Foundation (WPF) application for managing student information. You place a Button control named btnSort and a DataGridView control named dgStudents on the design surface of the MainWindow.xaml file. You create a Student class with two properties: FirstName and LastName. You create the following code segment in the constructor of the main window.

```
Students = New List(Of Student)()
New Student() {
 New Student() With { .FirstName = "Nicole", _
 .LastName = "Holliday" _
 ...
}
}
```

The DataGridView control displays the list of students unsorted. You need to ensure that the list of students is sorted by last name. Which code segment should you add to the click event handler of the Button control?

A. Dim sortedStudents As innumerable(Of Student) =  
 Students.OrderBy(Function(s) s.LastName).ToList()  
 dgStudents.ItemsSource = sortedStudents  
 B. Students.Sort()  
 dgStudents.ItemsSource = Students  
 C. Dim sortedStudents As IEnumerable(Of Student)  
 Students.orderBy (Function (s) s.LastName)  
 dgStudents.ItemsSource = sortedStudents  
 D. Students.Reversed  
 dgStudents.ItemsSource = Students

---

**Answer: B**

---

### Question: 75

---

You are developing a windows Presentation Foundation (WPF) application. A TextBlock control has DataContext bound to a static resource named Book. The ToolTip attribute of TextBlock displays the full book titles. You create a converter named TrimTitleConverter to shorten the book titles to three words in the Text attribute of the TextBox. You add the converter to the Resources section of the MainWindow.xaml file as follows. (Line numbers are included for reference only.)

```

01 <Window.Resources>
02 <src:TrimTitleConverter x:Key="TrimConverter" />
03 <src:Book x:Key="Book" />
04 </Window.Resources>
05 <Grid>
06 <TextBlock
07 ToolTip="{Binding Title}"
08 Text="{Binding Title}"
09 DataContext="{StaticResource ResourceKey=Book}" />
10 </Grid>
```

You need to ensure that the shortened book titles appear only in the Text attribute of TextBlock. Which markup segment should you use to replace lines 06 through 09?

- A. <TextBlock  
 ToolTip="{Binding Title}"  
 Text-"(Binding RelativeSource=  
 {RelativeSource TemplatedParent}, Path-ToolTip,  
 Converter"(StaticReaource ResourceKey TrlmConverter))"  
 DataContext = "{StaticResource ResourceKey=Book}"/>
- B. <TextBlock  
 ToolTip="(Binding Title,  
 Converter=(StaticResource ResourceKey=TrimConverter))"  
 Text-Bindnding RelativeSource=  
 {RelativeSource TemplatedParent}, Path-ToolTip)"  
 DataContext-"{StaticResource ResourceKey-Boolc) "/>
- C. <TextB1ock  
 ToolTip="{Binding Title,  
 Converter = {StaticResource ResourceKey=TrimConverter}}"  
 Text="(Binding RelativeSource=  
 {Relativesource self}, Path"ToolTip)"

```
DataContext="{StaticResource ResourceKey=Book}"/>
D. <TextBlock
 ToolTip="{Binding Title}"
 Text="{Binding RelativeSource=
 {RelativeSource Self}, Path=ToolTip,
 Converter=<StaticResource ResourceKey=TrimConverter>}"
 DataContext="(StaticResource ResourceKey=Book)*"/>
```

---

**Answer: D**

---

### **Question: 76**

---

You are developing a Windows Presentation Foundation (WPF) application. You are writing data templates for a calendar. You must use the Weekend template for weekends and the Weekday template for weekdays. The Window markup is as follows. (Line numbers are included for reference only.)

```
01 <Window xmlns:local="clr-namespace:MyApp">
02 <Window.Resources>
03 <DataTemplate x:Key="Weekend">
04 ...
05 </DataTemplate>
06 <DataTemplate x:Key="Weekday">
07 ...
08 </DataTemplate>
09 <local:WeekendSelector x:Key="WeekendSelector" />
10 </Window.Resources>
11
12 </Window>
```

You need to ensure that the Weekend and Weekday templates are applied correctly to the ListBox control. Which markup segment should you insert at line 11?

- A. <ListBox  
ItemTemplateSelector="{Binding WeelcendSelector}"/>
- B. <ListBox  
ItemTemplate="{StaticResource WeekendSelector} "/>
- C. <ListBox  
ItemTemplate=" {Binding WeekendSelector} "/>
- D. <ListBox  
ItemTemplateSelector=" {StaticResource WeekendSelector}"/>

---

**Answer: D**

---

### **Question: 77**

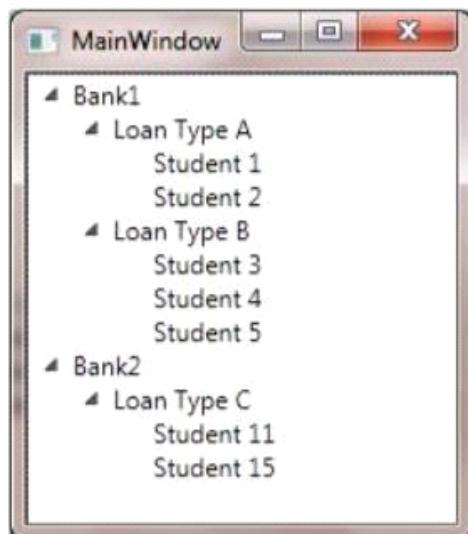
---

You are developing a Windows Presentation Foundation (WPF) application to display loan types by bank and students by loan type. You add the following markup segment to the MainWindow.xaml file. (Line numbers are included for reference only.)

```

01 <Window.Resources>
02 <DataTemplate x:Key="Students"
03 DataType="{x:Type mod:Student}"
04 <TextBlock Text="{Binding FullName}" />
05 </DataTemplate>
06 <HierarchicalDataTemplate x:Key="LoanList"
07 DataType="{x:Type mod:Loan}"
08 ItemsSource="{Binding Path=Students}"
09 ItemTemplate="{StaticResource ResourceKey= }">
10 <TextBlock Text="{Binding LoanName}" />
11 </HierarchicalDataTemplate>
12 <HierarchicalDataTemplate x:Key="BankList"
13 DataType="{x:Type mod:Lender}"
14 ItemsSource="{Binding Path=StudentLoans}"
15 ItemTemplate="{StaticResource ResourceKey= }">
16 <TextBlock Text="{Binding LenderName}" />
17 </HierarchicalDataTemplate>
18 </Window.Resources>
19 <Grid>
20 <TreeView x:Name="treeLoan"
21 ItemTemplate=
22 "{StaticResource ResourceKey=BankList}"/>
23 </Grid>

```



You need to ensure that the data appears in hierarchical form in a TreeView control. What should you do?

- A. At line 09, set the Resource Key to LoanList.  
A: line 15, set the Resource Key to Students.
- B. At line 09, set the Resource Key to Students.  
At line 15, set the Resource Key to LoanList.
- C. At line 09, set the Resource Key to Lender.  
At line 15, set the Resource Key to BankList.
- D. At line 09, set the Resource Key to BankList.  
At line 15, set the Resource Key to Lender.

---

**Answer: D**

---

**Question: 78**

---

You are developing a Windows Presentation Foundation (WPF) application. The application contains a converter named DateOutputConverter that formats dates. The window is defined as follows. (Line numbers are included for reference only.)

```
01 <Window xmlns:m="clr-namespace:sampleWPF"
02 x:Class="sampleWPF.MainWindow"
03 xmlns="..."
04 xmlns:x="...">
05 <Window.Resources>
06 <m:Order x:Key="shippedOrder" />
07
08 </Window.Resources>
09 <StackPanel x:Name="orderStackPanel" Margin="4">
10
11 </StackPanel>
12 </Window>
```

The window must display the OrderDate value found in shippedOrder. The text box must display the OrderDate formatted by the DateOutputConverter. You need to ensure that the OrderDate is displayed and formatted correctly. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. insert the following code at line 10.

```
<textBox Text="{Binding OrderDate}"/>
```

B. Insert the following code at line 07.

```
<m:DataOutputConverter x:Key="DataOutputConverter"/>
```

C. Insert the following code at line 10.

```
<textBox Text="{Binding OrderDate,
 Converter={StaticResource internationalDateConverter}}"
 DataContext.='{StaticResource ResourceKey=shippedOrder}'/>
```

D. Insert the following code at line 07.

```
<m:DateOutputConverter x:Key="internationalDataConverter"/>
```

---

**Answer: A, D**

---

### **Question: 79**

---

You are developing a Windows Presentation Foundation (WPF) application. The window has the following markup. (Line numbers are included for reference only.)

```
01 <Window.Resources>
02 <Style TargetType="{x:Type ListBox}">
03 <Setter Property="ItemsPanel">
04 <Setter.Value>
05 <ItemsPanelTemplate>
06 <StackPanel Orientation="Horizontal"
07 VerticalAlignment="Center"
08 HorizontalAlignment="Center"/>
09 </ItemsPanelTemplate>
10 </Setter.Value>
11 </Setter>
12 <Setter Property="Template">
13 <Setter.Value>
14 <ControlTemplate TargetType="{x:Type ListBox}">
15
16 </ControlTemplate>
17 </Setter.Value>
18 </Setter>
19 </Style>
20 </Window.Resources>
```

You need to ensure that all `ListBox` controls have a border that matches the background color of the `ListBox` template. Which markup segment should you insert at line 15?

- A. `<Border Background="TemplateBinding ListBox.Background">`  
`<ContentPresenter />`  
`</Border>`
- B. `<Border Background="{Binding ListBox.Background}">`  
`<ContentPresenter />`  
`</Border>`
- C. `<Border Background=<Binding ListBox.Background>>`  
`<ItemsPresenter />`  
`</Border>`
- D. `<Border Background="TemplateBinding ListBox.Background">`  
`<ItemsPresenter />`  
`</Border>`

---

**Answer: D**

---

### **Question: 80**

---

You are developing a Windows Presentation Foundation (WPF) application. The application has several visual controls on a main page. You need to restyle all of the UI-related elements on the main page at run time. Which class should you use to reference all these elements in a single call?

- A. `ContentElement`
- B. `UIElement`
- C. `VisualTreeHelper`
- D. `LogicalTreeHelper`

---

**Answer: C**

---

### **Question: 81**

---

You are developing a Windows Presentation Foundation (WPF) application. The application has an Image control. You need to ensure that a portion of the image displays in a circle in the control. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

- A. Add an Image.Clip element to the control. Use EllipseGeometry within Image.Clip.
- B. Add an Ellipse element to the control. Use Ellipse.Stroke and ImageBrush with the image as ImageSource.
- C. Add an Ellipse element to the control. Use Ellipse.Fill and ImageBrush with the image as ImageSource.
- D. Add an Image.Clip element to the control. Use LineGeometry within Image.Clip.

---

**Answer: A, C**

---

### **Question: 82**

---

You are developing a Windows Presentation Foundation (WPF) application. You are implementing a test strategy for the application. You need to ensure that the history of your testing session can be rewound in the execution cycle so that the state of the application and events that occurred previously can be viewed. What should you use?

- A. visual Studio debugger break points
- B. intelliTrace
- C. coded UI Tests
- D. an error dump file

---

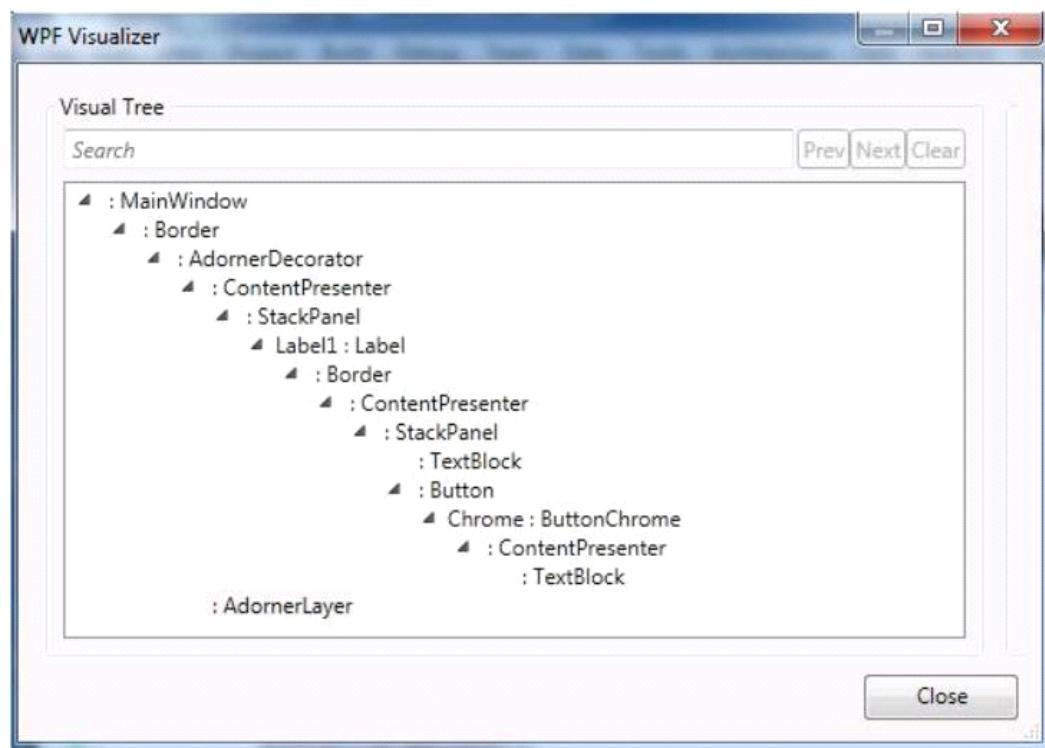
**Answer: B**

---

### **Question: 83**

---

You are developing a Windows Presentation Foundation (WPF) application. There is an issue in the display of Label. When you open the WPF Visualizer, you see the following information in the left-hand panel of the Visualizer.



You need to identify the XAML markup for the Label control that caused the issue. Which markup segment corresponds to the Label control?

- A. <Label Name="Label1">  
Button Click="Button\_Clicks  
<StackPanel Orientation="Horizontal">  
<TextBlock Text="Click!" />  
<Button Content="Click!" Click="Button\_Click" />  
</StackPanel>  
</Button> </Label>
- B. <Label Name="Label1">  
<StackPanel Orientation="Horizontal">  
<Button Click="Button\_Click">  
<TextBlock Text="Click!" />  
</Button>  
</StackPanel>  
</Label>
- C. <Label Name="Label1">  
<Button Click="Button\_Click">  
<StackPanel Orientation="Horizontal">  
<TextBlock Text="Click!" />  
</StackPanel>  
</Button>  
</Label>
- D. <Label Name="Label1">  
<StackPanel Orientation="Horizontal">  
<TextBlock Text="Click!" />  
<Button Content="Click!" Click="Button\_Click" />  
</StackPanel>  
</Label>

---

**Answer: D**

---

#### **Question: 84**

---

You are deploying a Windows Forms application. You use the Publishing wizard within Visual Studio to configure ClickOnce options. You need to ensure that a custom zone is created with specific permissions within the security tab of Visual Studio. What should you do?

- A. Enable the ClickOnce security settings. Then edit the deployment.application file.
- B. Disable the ClickOnce security settings. Then edit the deployment.application file.
- C. Enable the ClickOnce security settings. Choose the "This is a Full Trust Application" radio button. Then edit the app.manifest file.
- D. Enable the ClickOnce security settings. Choose the "This is a Partial Trust Application" radio button. Then edit the app.manifest file.

---

**Answer: D**

---

#### **Question: 85**

---

You are developing a Windows Presentation Foundation (WPF) application. The application uses drag-and-drop functionality. You need to ensure that code is executed in the code-behind file when the dragged item is released onto the target element. Which enumeration should you use?

- A. DragDropEffects.None
- B. DragDropEffects.All
- C. DragAction.Drop
- D. DragAction.Cancel

---

**Answer: C**

---

### **Question: 86**

---

You develop a Windows Presentation Foundation (WPF) application. The application runs on 64-bit machines only. The application architects want to store application settings in the registry. The users do not have write access to these settings. These application settings apply to everyone using the application. You need to read the application settings successfully from the registry. Which code segment should you use?

- A. RegistryKey
  - OpenBaseKey(RegistryHive.LocalMachine, RegistryView.Registry64)\_
  - OpenSubKey ("Software\MyProgram")\_
  - GetValue("ConnectionString")
- B. RegistryKey
  - OpenBaseKey(RegistryHive.LocalMachine, RegistryView.Registry64)\_
  - CreateSubKey("Software\MyProgram")\_
  - GetValue("ConnectionString")
- C. RegistryKey \_
  - OpenBaseKey(RegistryHive.CurrentUser, RegistryView.Registry64)\_
  - CreateSubKey("Software\MyProgram")
  - GetValue("ConnectionString")
- D. RegistryKey
  - OpenBaseKey(RegistryHive.CurrentUser, RegistryView.Registry64)\_
  - OpenSubKey("Software\MyProgram")\_
  - GetValue("ConnectionString")

---

**Answer: A**

---

### **Question: 87**

---

You are developing a Windows Presentation Foundation (WPF) application. This application will be deployed to 20 countries. However, it will only be localized to some of those countries' regional dialects. The localization will be performed by using resource files. However, no culture will be specified in the project file with the UICulture tags. You must ensure that the application defaults to English for those regions that are not localized. What should you do?

- A. Add the following code segment to the AssemblyInfo file.  
<Assextby: NeutralResourcesLanguage ("en-US", UltimateResourceFallbackLocation.Satellite) >

B. Add the following code segment to the AssemblyInfo file.

```
<Assembly: NeutralResourceLanguage ("en-US",
 UltimateResourceFallbackLocation.MainAssembly|>
```

C. Add the following code segment to the Application constructor. Thread.CurrentThread.CurrentCulture = New CultureInfo ("en-DS")

D. Add the following code segment to the Application constructor. Thread.CurrentThread.CurrentCulture = New CultureInfo("en-US")

---

**Answer: B**

---

### **Question: 88**

---

You are developing a Windows Presentation Foundation (WPF) application. The application uses a DockPanel control with its HorizontalAlignment property set to Left to divide the main window into three distinct columns. Each column is a panel that is responsible for the layout of its own controls. You need to reverse the order of the columns. What should you do?

- A. Set the HorizontalAlignment property to Right on the DockPanel.
- B. Set the LayoutTransform property to Identity on the DockPanel.
- C. Set the DockPanel.Dock property to Right on each of the panels.
- D. Set the FlowDirection property to RightToLeft on each of the panels.

---

**Answer: C**

---

### **Question: 89**

---

You are developing a Windows Presentation Foundation (WPF) application page. The page uses extensive graphics controls and animation that require absolute positioning. You need to select a control to use as a container. Which control should you select?

- A. Canvas
- B. DockPanel
- C. StackPanel
- D. Grid

---

**Answer: A**

---

### **Question: 90**

---

You are creating a Windows Presentation Foundation (WPF) application. A control periodically appears to alert the user of status changes within the application. You need to specify that each time the control appears, it fades out within half a second. Which markup segment should you add to the Storyboard element of the control?

- A. <DoubleAnimation Storyboard.TargetProperty="Opacity"  
From = "1" To "0" Duration "0:0:.5" />
- B. <DoubleAnimation Storyboard.TargetProperty="Opacity"  
From="1" To="0" Duration="0:0:.5"  
RepeatBehavior="0:0:5" />
- C. <DoubleAnimation Storyboard.TargetProperty="Opacity"

From="0" To=".5" />  
 D. <DoubleAnimation Storyboard.TargetProperty="Opacity"  
 From="1" To="0" Duration="0:0:.5"  
 RepeatBehavior="Forever" />

---

**Answer: B**

---

### Question: 91

---

You are developing a Windows Presentation Foundation (WPF) application. You pull employee information from an XML file named EmployeeData.xml. The XML file is as follows.

```
<Employees>
 <Employee Name="Bob" DateOfBirth="1990"
 Level="Accountant" Department="Accounting"/>
 <Employee Name="Amy" DateOfBirth="1987"
 Level="Accountant" Department="Accounting" />
 <Employee Name="Dan" DateOfBirth="1978"
 Level="Manager" Department="Accounting"/>
 <Employee Name="Joanna" DateOfBirth="1970"
 Level="Controller" Department="Accounting" />
</Employees>
```

The **ListBox** control you are using is declared as follows.

```
<ListBox x:Name="EmployeeList"
 ItemsSource="{Binding Source={StaticResource FeedData},
 XPath=Employee}">
 ...
</ListBox>
```

You need to display all the employee information from the XML file in EmployeeList. Which markup segment should you use?

- A. <ListBox.Resources>  
<XmlDataProvider x:Key="FeedData"  
Source="EmployeeData.xml" Xpath="/Employees"/>  
</ListBox.Resources>
- B. <Window.Resources>  
<XmlDataProvider x:Key="FeedData"  
Source="EmployeeData.xml" Xpath="/Employees/Employee"/>  
</Window.Resources>
- C. <ListBox.Resources>  
<XmlDataProvider x:Key="FeedData"  
Source="EmployeeData.xml" Xpath="/Employees/Employee"/>  
</ListBox.Resources>
- D. <Window.Resources>  
<XmlDataProvider x:Key="FeedData"  
Source="EmployeeData.xml" Xpath="/Employees"/>  
</Window.Resources>

---

**Answer: D**

---

### Question: 92

---

You are developing a Windows Presentation Foundation (WPF) application. Two styles, Blue and Green, are used for Border objects. The two styles have the same values for the CornerRadius and BrushThickness properties and different values for the Background property. You need to define the CornerRadius and BrushThickness settings in either the Blue or the Green style, but not both. What should you do?

- A. Separate Blue and Green into two files. Put the base settings in Blue and use MergedDictionaries. Ensure that the Blue file is second in the list.
- B. Separate Blue and Green into two files. Put the base settings in Blue and use MergedDictionaries. Ensure that the Green file is second in the list.
- C. Put Blue and Green into the same file. Put the base settings in Blue and mark Green as BasedOn Blue.
- D. Put Blue and Green into the same file. Put the base settings in Blue and mark Blue as BasedOn Green.

---

**Answer: D**

---

### **Question: 93**

---

You are developing a Windows Presentation Foundation (WPF) application page. The controls on the page must be enclosed within a single rectangular border. The border must contain an image in the header. You need to select a control to use as a container. Which control should you select?

- A. Border
- B. Rectangle
- C. Expander
- D. GroupBox

---

**Answer: D**

---

### **Question: 94**

---

You are developing a Windows Presentation Foundation (WPF) application. The movement of a control within the application is animated. You need to ensure that the animated control is continually animated in one direction. What should you specify for the easing function of the animations?

- A. BackEase
- B. BounceEase
- C. ElasticEase
- D. sineEase

---

**Answer: D**

---

### **Question: 95**

---

You develop a Windows Presentation Foundation (WPF) application. This application is used to output data trends to customer service representatives. You use threading to keep the UI responsive. You have a function named UpdateUI that updates all of the UI components. You use the following code to update the \_Data variable. (Line numbers included for reference only.)

```
01 Private _Data As String
02 Private Sub UpdateData(ByVal arg As Object)
03
04 Dim data As Double = UpdateTrendData()
05 _Data = data.ToString()
06
07 End Sub
```

You need to update the user interface without knowing if you are on the UI thread. Which code segment should you insert at line 06?

- A. If (Me.Dispatcher.CheckAccess()) Then  
Dim [function] = New Action(AddressOf UpdateUI)  
Dim args() As Object = Nothing  
Me.Dispatcher.BeginInvoke([function], args)  
Else  
UpdateUI()  
End If
- B. If (Me.Dispatcher.CheckAccess())  
Then UpdateUI()  
Else  
Dim [function] = New Action(AddressOf UpdateUI)  
Dim args() As Object = Nothing  
Me.Dispatcher.BeginInvoke([function], args)  
End If
- C. Me.Dispatcher.VerifyAccess()  
Dim [function] = New Action(AddressOf UpdateUI)  
Dim args() As Object = Nothing  
Me.Dispatcher.BeginInvoke([function], args)
- D. Me.Dispatcher.VerifyAccess()  
UpdateUI()

---

**Answer: B**

---

### **Question: 96**

You are developing a Windows Presentation Foundation (WPF) application. A custom control has a dependency property that is bound to a property of type Int16 on a business layer object. You need to ensure that the bound value always falls within the range of an Int16 value, even if the value that the user enters does not. What should you do?

- A. within the Dependency property's metadata, specify a callback for coercion.
- B. within the Dependency property's metadata, specify a callback for validation.
- C. Specify code in the common language runtime (CLR) wrapper to adjust the value if it falls outside the range of an Int16 value.
- D. Register the property type of the Dependency property as Int 16.

---

**Answer: A**

---

### **Question: 97**

You are developing a Windows Presentation Foundation (WPF) application. A window is defined in the following markup segment.

```
<Window x:Class="WpfApplication2.MainWindow"
 xmlns="..."
 xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml">
 <Grid x:Name="grid1"/>
</Window>
```

You need to add a Windows Forms Button control to the window programmatically. Which code segment should you use?

A. Dim host As WindowsFormsHost = New WindowsFormsHost()

```
Dim wfButton As System.Windows.Forms.Button =
New System.Windows.Forms.Button()
wfButton.Text = "Button" host.FindName("Button")
grid1.Children.Add(host)
```

B. Dim host As WindowsFormsHost = New WindowsFormsHost()

```
Dim wfButton As System.Windows.Forms.Button =
New System.Windows.Forms.Button()
wfButton.Text = "Button"
host.Child = wfButton
grid1.Children.Add(host)
```

C. Dim wfButton As System.Windows.Controls.Button = New System.Windows.Controls.Button()

```
wfButton.Content = "Button"
grid1.Children.Add(wfButton)
```

D. Dim host As WindowsFormsHost = New WindowsFormsHost()

```
Dim wfButton As System.Windows.Controls.Button =
New System.Windows.Controls.Button()
wfButton.Content = "Button"
grid1.Children.Add(wfButton)
```

---

**Answer: B**

---

### **Question: 98**

---

You are developing a Windows Presentation Foundation (WPF) application. You add several TextBox controls within a StackPanel control. You next add several Image controls within a second StackPanel control. During testing, you discover that some of the textboxes do not appear in the proper layout. You need to quickly search for the textboxes and view their properties to identify which ones are incorrect. What should you do?

A. Open the QuickWatch window and select the Text Visualizer.

B. Open the Locals window and select the WPF Tree Visualizer.

C. Open the Autos window and select the HTML Visualizer.

D. Open the Watch window and select the XML Visualizer.

---

**Answer: B**

---

### **Question: 99**

---

You are developing a Windows Presentation Foundation (WPF) application. You are planning the deployment strategy for the application. You need to write specific information to the registry during deployment for each user. Which deployment strategy should you use?

- A. XBAP
- B. Xcopy
- C. ClickOnce
- D. Setup Project

---

**Answer: B**

---

### **Question: 100**

---

You are developing a Windows Presentation Foundation (WPF) application. An element binding consistently throws errors because the data retrieval is slow. You need to ensure that the PresentationTraceSource binding is configured to debug the source of these errors. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two).

- A. Add the following markup segment to the problem element.

"diagnostics:PresentationTraceSources.TraceLevel=High"

- B. Add the following markup segment to the problem element. "diagnostics:ConsoleTraceListener"

- C. Add the following markup segment to the window definition.

xmlns: diagnostics=

"clr-namespace:Microsoft.Build.Debugging;

assembly=Microsoft.Build"

- D. Add the following markup segment to the window definition.

xmlns: diagnostics=

"clr-namespace: System.Diagnostics;assembly=WindowsBase"

---

**Answer: A, C**

---

### **Question: 101**

---

You develop a Windows Presentation Foundation (WPF) application. You will use ClickOnce to publish it to a Web server. You add a Button control to the Windows Form with the following code segment. (Line numbers are included for reference only.)

```
01 Dim info As UpdateCheckInfo = Nothing
02 If (ApplicationDeployment.IsNetworkDeployed) Then
03
04 Dim updateCode As ApplicationDeployment =
05 ApplicationDeployment.CurrentDeployment
06
07 If (info.UpdateAvailable) Then
08
09 MessageBox.Show("Update complete. Restart.")
10 Application.Restart()
11 End If
12 End If
```

You need to ensure that the update performs as designed. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.) You need to ensure that the update performs as designed. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. insert the following code at line 06.

updateCode.DownloadFileGroup(Nothing)

- B. Insert the following code at line 06.

info = updateCode.CheckForDetailedUpdate()  
C. insert the following code at line 08.  
updateCode.Update()  
D. Insert the following code at line 08.  
updateCode.UpdateAsyncCancel()

---

**Answer: A, C**

### **Question: 102**

---

You are deploying a ClickOnce application manually in a test environment. You need to ensure that the deployment is signed with a self-signed test X.509 certificate. Which tool should you use to create the certificate?

- A. makecert.exe
- B. cert2spc.exe
- C. Ic.exe
- D. mage.exe

---

**Answer: A**

### **Question: 103**

---

You are developing a Windows Presentation Foundation (WPF) application. The WPF window contains a ListBox control that displays a list of customer names and genders. You add the following markup segment to the application. (Line numbers are included for reference only.)

```
01 <Grid>
02 <ListBox x:Name="lstCustomer">
03 <ListBox.ItemTemplate>
04 <DataTemplate>
05 <StackPanel Orientation="Horizontal">
06 <TextBlock Text="{Binding Path=CustName}" />
07 <TextBlock Text=" , " />
08 <TextBlock Text="{Binding Path=Gender}" />
09 </StackPanel>
10 </DataTemplate>
11 </ListBox.ItemTemplate>
12 </ListBox>
13 </Grid>
```

The WPF window renders the list of customers with empty Gender values. You need to convert the null values for Gender to the following string: "Gender Not Specified". Which binding attribute should you add at line 08?

- A. FallbackValue='Gender Not Specified'
- B. StringFormat='Gender Not Specified'
- C. TargetNullValue='Gender Not Specified'
- D. Source='Gender Not Specified'

---

**Answer: C**

### **Question: 104**

---

You are developing a Windows Presentation Foundation (WPF) application. Users can enter formatted percentages into text boxes.

The markup is as follows.

```
<TextBox Text="{Binding Path=Percentage,
Converters StaticResource PercentValueConverter}" />
```

Percentage is a decimal property.

You need to store the percentages as their decimal values, not their display values. Which code segment should you use?

A. Public Function Convert (

```
 ByVal value As Object, ByVal targetType As Type,
 ByVal parameter As Object, ByVal culture As CultureInfo)
As Object
Return CDec (parameter).ToString ("P")
End Function
```

B. Public Function ConvertBack{

```
 ByVal value As Object, ByVal targetType As Type,
 ByVai parameter As Object, ByVal culture As CultureInfo)
As Object
Return (Decimal.Parse(value.ToString()) / 100)
End Function
```

C. Public Function Convert (

```
 ByVal value As Object, ByVal targetType As Type,
 ByVal parameter As Object, ByVal culture As CultureInfo)
As Object
Return CDec(value).ToString("P")
End Function
```

D. Public Function ConvertBack(

```
 ByVal value As Object, ByVal targetType As Type,
 ByVal parameter As Cliert, ByVal culture As cultureInfo)
As Object
Return (Decimal.Parse (parameter.ToString ()) / 100)
End Function
```

---

**Answer: B**

---

### Question: 105

---

You are developing a Windows Presentation Foundation (WPF) application. You have a class named Orders, which contains OrderId and ShipOn properties. You place a control in the MainWindow.xaml file, as follows. (Line numbers are included for reference only.)

```
01 <ComboBox x:Name="cmbOrders"
02 ItemSource="{Binding Orders}"
03
04 </ComboBox>
```

When you run the application, the ComboBox control displays the class name for every row.

You need to ensure that the ComboBox control displays the OrderId and ShipOn values in columns. Which markup segment should you add at line 03?

A. <ItemsControl.ItemTemplate>  
<BataTemplate>

```

<Grid>
<Grid.ColumnDefinitions>
<ColumnDefinition />
<ColumnDefinition />
</Grid.ColumnDefinitions>
<TextBlock Grid.Column="0" Text="{Binding OrderId}"/>
<TextBlock Grid.Column="1" Text={Binding ShipOn}"/>
</Grid>
</DataTemplate>
</ItemsControl.ItemTemplate>
B. <ItemsControlTemplate>
<DataTemplate>
<Grid>
<TextBlock Text="{Binding OrderId}"/>
<TextBlock Text={Binding ShipOn}"/>
</Grid>
</DataTemplate>
</ItemsControl.ItemTemplate>
C. <ItemsControl.ItemsPanel>
<ItemsPanelTemplate>
<Grid>
<Grid.ColumnDefinitions>
<ColumnDefinition />
<ColumnDefinition />
</Grid.ColumnDefinitions>
<TextBlock Grid.Column="0" Text="{Binding OrderId}"/>
<TextBlock Grid.Column="1" Text={Binding ShipOn}"/>
</Grid>
</ItemsPanelTemplate>
</ItemsControl.ItemsPanel>
D. <ItemsControl.ItemsPanel>
<ItemsPanelTemplate>
<Grid>
<TextBlock Text="{Binding OrderId}"/>
<TextBlock Text={Binding ShipOn}"/>
</Grid>
</ItemsPanelTemplate>
</ItemsControl.ItemsPanel>

```

---

**Answer: A**

---

### **Question: 106**

---

You are developing a Windows Presentation Foundation (WPF) application. You add a TextBox control to the design surface and bind it to an underlying window resource named dsGiftCertificate. The control uses the binding XAML as follows.

```

<Binding Source="{StaticResource dsGiftCertificate}"
UpdateSourceTrigger = "LostFocus" Path="Coupon" />

```

You need to provide a custom error message in the tooltip of the TextBox when the user leaves the textbox. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Implement the `IDataErrorInfo` interface. Use the indexer for the custom validation and error message.
- B. Implement the `INotifyPropertyChanged` interface. Use the indexer for the custom validation and error message.
- C. Update the binding source as follows.

```
<Binding Source = "{StaticResource dsGiftCertificate}"
UpdateSourceTrigger = "LostFocus" Path="Coupon"
ValidatesOnDataErrors= "True" />
```

- D. Update the binding source as follows.

```
<Binding Source="{StaticResource dsGiftCertificate}"
UpdateSourceTrigger="Expicit" Path="Coupon"
ValidatesOnDataErrors="True" />
```

---

**Answer: B, C**

---

### **Question: 107**

---

You are developing a Windows Presentation Foundation (WPF) application.

The application consists of:

- A window that contains controls organized into groups.
- Groups that are ordered vertically and that have individual headings.
- Controls within the groups that are ordered horizontally.
- Groups and controls that will be added dynamically at run time.

You need to ensure that the application meets the following requirements:

- The window must be resizable without affecting the layout of the controls.
- The controls within the groups must be laid out such that there is a minimum amount of spacing between groups.

What should you do?

- A. use a `WrapPanel` control to organize the groups with its `Orientation` property set to `Vertical`. Use `WrapPanel` controls to organize the controls with their `Orientation` property set to `Horizontal`.
- E. Use a `Grid` control with its `VerticalAlignment` property set to `Stretch` to organize the groups and specify the row definitions. Use `Grid` controls to organize the controls and specify the column definitions.
- C. Use a `ListBox` control to organize the groups. Use `Canvas` controls to organize the controls.
- D. Use a `StackPanel` control to organize the groups with its `Orientation` property set to `Vertical`. Use `StackPanel` controls to organize the controls with their `Orientation` property set to `Horizontal`.

---

**Answer: D**

---

### **Question: 108**

---

You are developing a Windows Presentation Foundation (WPF) application. You need to ensure that the application includes a container control that supports logical scrolling by default. Which control should you select?

- A. `StackPanel`
- B. `WrapPanel`
- C. `Canvas`
- D. `Grid`

---

**Answer: A**

---

---

### **Question: 109**

---

You are developing a Windows Presentation Foundation (WPF) application with multiple windows. The majority of the buttons within the application are styled consistently. However, three buttons within the application must be styled differently. You need to ensure that the application can handle this styling requirement. What should you do?

- A. Create the styles in the main window resources. Omit the Key property for the default Button style and specify the Key property for the Button style and the three buttons.
- B. Create the styles in the application resources. Specify the TargetType property to be Button for the default style but not for the three buttons.
- C. Create the styles in the main window resources. Specify the TargetType property to be Button for the default style but not for the three buttons.
- D. Create the styles in the application resources. Omit the Key property for the default Button style and specify the Key property for the Button style and the three buttons.

---

**Answer: D**

---

---

### **Question: 110**

---

You are developing a Windows Presentation Foundation (WPF) application. The application is bound to a data source. You need to ensure that the style of controls is bound to values retrieved from the data source. What should you do?

- A. Create a DataTrigger element within the style that specifies the path to the bound property.
- B. Create a Trigger element within the style that specifies the property value as the bound property.
- C. Create the style and specify the BasedOn attribute.
- D. Create the style and specify the TargetType attribute.

---

**Answer: A**

---

---

### **Question: 111**

---

You are developing a Windows Presentation Foundation (WPF) application. The application's main window lists a series of controls horizontally until a control reaches the edge of the window. At that point, the series of controls continues on a new line. You need to ensure that this layout persists when the user changes the size of the window. What should you do?

- A. Place each control in a DockPanel control and set its Dock property to Left.
- B. Place the controls in a grid and define the rows and columns using star sizing.
- C. Place each control in a StackPanel control and set its Orientation property to Horizontal.
- D. Place each control in a WrapPanel control and set its Orientation property to Horizontal.

---

**Answer: D**

---

---

### **Question: 112**

---

You are developing a Windows Presentation Foundation (WPF) application. A user control responds to a click event. The click event handler sets the Handled property to True. You need to ensure that a parent control responds to the event after the user control's handler executes. What should you do?

- A. Add a bubbling routed event handler to the parent control.
- B. Programmatically add an event handler to the parent control and set the HandledEventsToo property to True.
- C. Add a tunneling routed event handler to the parent control.
- D. Programmatically add an event handler to the parent control and set the HandledEventsToo property to False.

---

**Answer: B**

---

### **Question: 113**

---

You are developing a Windows Presentation Foundation (WPF) application. The application contains the following markup.

```
<Expander x:Name="Products" IsExpanded="True">
 <Expander.Header>
 <ComboBox x:Name="Filter">
 ...
 </ComboBox>
 </Expander.Header>
 ...
</Expander>
```

You need to ensure that the Filter combo box is hidden when the expander is collapsed. What should you do?

- A. Add the following DataTrigger element to the Expander control.

```
<DataTrigger Binding="Binding ElementName=Filter,
Path=IsExpanded}" Value="False">
 <Setter Property="UIElement.Visibility"
Value="Collapsed" />
</DataTrigger>
```

- B. Add the following DataTrigger element to the Expander control.

```
<DataTrigger Binding=" {Binding ElementName=Filter,
Path=Visibility}" Value="Collapsed">
 <Setter Property="Expander.IsExpanded"
Value="False" />
</DataTrigger>
```

- C. Add the following DataTrigger element to the ComboBox control.

```
DataTrigger Binding=" {Binding ElementName=Products,
Path=IsExpanded}" Value="False">
 <Setter Property="UIElement.Visibility"
Value="Collapsed"/>
</DataTrigger>
```

- D. Add the following DataTrigger element to the ComboBox control.

```
<DataTrigger Binding=" {Binding ElementName=Products/
Path=Visibility}" Value="Collapsed">
 <Setter Property="Expander.IsExpanded"
Value="False"/>
</DataTrigger>
```

---

**Answer: C**

---

### **Question: 114**

---

You are developing a Windows Presentation Foundation (WPF) application. A UserControl named usercontroll contains the following controls.

```
<StackPanel>
<Label Name="label1" Content="Hello Exam!!!" />
</StackPanel>
```

You need to ensure that the content of the label displays "New Content!!!" programmatically from the code-behind of the application window that contains the UserControl. Which code segment should you use?

A. Dim label =  
TryCast(userControl1.FindResource("label1"), Label)  
label.Content = "New Content!!!"

B. userControll.Content = "New Content!!!"

C. Dim dp As DependencyProperty =  
DependencyProperty.Register("label1", GetType(Label),  
GetType(Window), New PropertyMetadata("New Content!!"))  
userControll.CoerceValue(dp)

D. Dim label =  
TryCast(userControll.FindName("label1"), Label)  
label.Content = "New Content!!!"

---

**Answer: D**

---