Lesson 9: Functions Part V – Formatting Date and Time

Formatting Date and time using predefined formats

Date and time can be formatted using predefined formats and also user-defined formats. The predefined formats of date and time are shown in table below.

Format	Explanation
Format (Now, "General date")	Formats the current date and time.
Format (Now, "Long Date")	Displays the current date in long format.
Format (Now, "Short date")	Displays current date in short format
Format (Now, "Long Time")	Display the current time in long format.
Format (Now, "Short Time")	Display the current time in short format.

- Instead of "General date", you can also use the abbreviated format "G", i.e Format(Now, "G"). And for "Long Time", you can use the abbreviated format "T". As for "Short time", you may use the abbreviated format "t"

Example

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        Label1.Text = Format(Now, "General Date")
        Label2.Text = Format(Now, "Long Date")
        Label3.Text = Format(Now, "short Date")
        Label4.Text = Format(Now, "Long Time")
        Label5.Text = Format(Now, "Short Time")
End Sub
```
   Output:

Formatting Date and time using user-defined formats

Using the predefined formats, you can also use the user-defined formatting functions. The general format of a user-defined for date/time is

Format(expression,style)
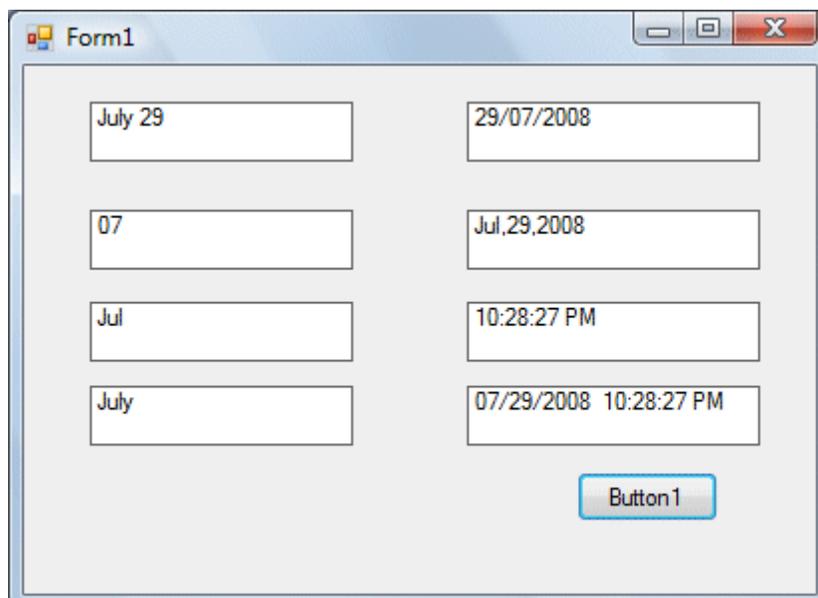
User-defined format functions for date and time

Format	Explanation
Format (Now, "M")	Displays current month and date
Format (Now, "MM")	Displays current month in double digits.
Format (Now, "MMM")	Displays abbreviated name of the current month
Format (Now, "MMMM")	Displays full name of the current month.
Format (Now, "dd/MM/yyyy")	Displays current date in the day/month/year format.
Format (Now, "MMM,d,yyyy")	Displays current date in the Month, Day, Year Format
Format (Now, "h:mm:ss tt")	Dispalys current time in hour:minute:second format and show am/pm
Format(Now,"MM/dd/yyyy h:mm:ss)	Dispalys current date and time in hour:minute:second format

Example

Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click, Button2.Click, Button3.Click

```
        Label1.Text = Format(Now, "M")
        Label2.Text = Format(Now, "MM")
        Label3.Text = Format(Now, "MMM")
        Label4.Text = Format(Now, "MMMM")
        Label5.Text = Format(Now, "dd/MM/yyyy")
        Label6.Text = Format(Now, "MMM,d,yyyy")
        Label7.Text = Format(Now, "h:mm:ss tt")
        Label8.Text = Format(Now, "MM/dd/yyyy h:mm:ss tt")
End Sub
```
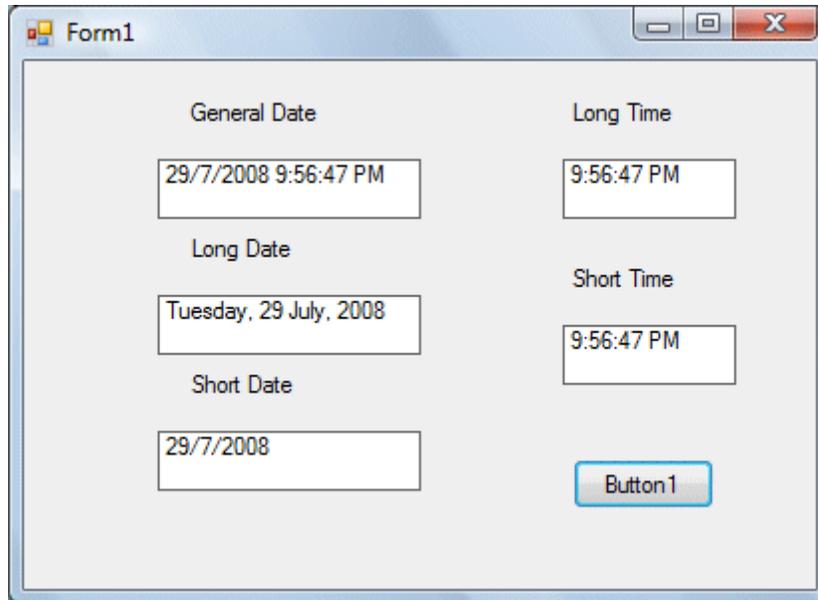
Output:

Lesson 9: Functions Part V – Formatting Date and Time

Student Task:

Directions: From this lesson, write a VB.Net program that will show the given output based on Lesson 9 Functions part V. Apply user-defined and predefined formatting date and time. Screen shot your compiled output in a short bond paper. Change form name into your full name (Last Name, First Name)

Sample output:

Predefined format function:

User-defined format:
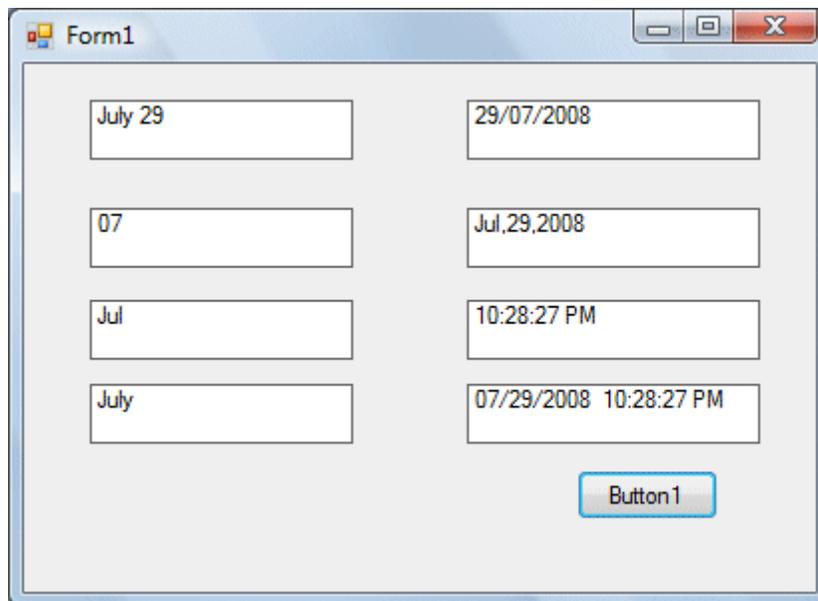
APRIL 27 – 30, 2020
Topic: LESSON 12: FUNCTIONS PART IV – FORMATTING FUNCTIONS

We can write code to customize the look of the output so that it can be more easily understood by a user. The function to customize the output is the **Format** function, a very powerful functions, one of them is the built-in or predefined format while another one can be defined by the users.

Syntax of the Predefined Format function:

Format(n, "style argument")

Where n is the number to be displayed and style argument is the style of the displayed number.

List of Style Arguments

Style argument	Explanation
General Number	To display the number without having separators between thousands
Fixed	To display the number without having separators between thousands and rounds it up to two decimal places
Standard	To display the number with separators or separators between thousands and rounds it up to two decimal places
Currency	To display the number with the dollar sign in front, has separators between thousands as well as rounding it up to two decimal places.
Percent	Converts the number to the percentage form and displays a % sign and rounds it up to two decimal places.

Example:

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click,
Button5.Click, Button4.Click, Button3.Click
        Label1.Text = Format(8972.234, "General Number")
        Label2.Text = Format(8972.2, "Fixed")
        Label3.Text = Format(6648972.265, "Standard")
        Label4.Text = Format(6648972.265, "Currency")
        Label5.Text = Format(0.56324, "Percent")
End Sub
```

Output window:
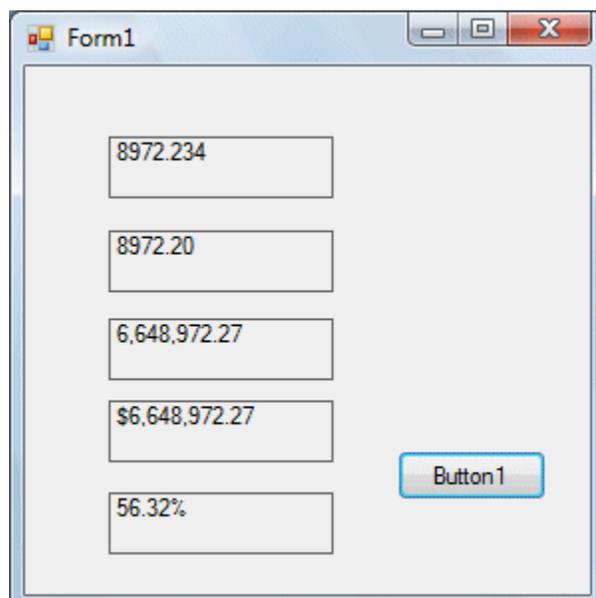
User-defined Format function

Format(n "user's format")

Although it is known as user-defined format, we still need to follow certain formatting styles.

User-defined Format

Example	Explanation
Format(781234.57,"0")	Rounds to whole number without separators between thousands.
Format(781234.57,"0.0")	Rounds to 1 decimal place without separators between thousands.
Format(781234.576,"0.00")	Rounds to 2 decimal places without separators between thousands.
Format(781234.576,"#,##0.00")	Rounds to 2 decimal places with separators between thousands.
Format(781234.576,"$#,##0.00")	Shows dollar sign and rounds to 2 decimal places with separators between thousands.
Format(0.576,"0%")	Converts to percentage form without decimal places.
Format(0.5768,"0.00%")	Converts to percentage form with 2 decimal places.

To Do:

Given an output program of the Lesson. Write the syntax of the program applying user defined format, Compile and run the given program.
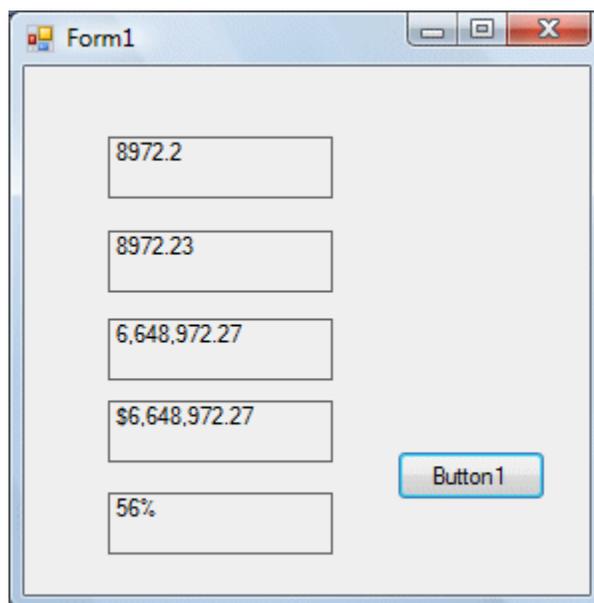
Note: All softcopy of programs should be compiled. As well as those handwritten.