

Question 1:

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Public Class Form1      'Ilker Hadzhalaran

    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        txtInputProductCode.Clear()

    End Sub

    Private Sub btnRun_Click(sender As Object, e As EventArgs) Handles btnRun.Click

        Dim strProductCode As String
        Dim blnAllValid As Boolean = True

        lblDisplayResults.Text = String.Empty

        strProductCode = CStr(txtInputProductCode.Text)

        If Not (strProductCode.Length >= 7 And strProductCode.Length <= 12) Then

            lblDisplayResults.Text &= "-Error: Product Code must be minimum 7 or maximum  
12 characters" & vbCrLf

            blnAllValid = False

        End If

        If strProductCode.Substring(0, 1).ToUpper() <> "A" And  
strProductCode.Substring(0, 1).ToUpper() <> "M" And strProductCode.Substring(0,  
1).ToUpper() <> "P" Then

            lblDisplayResults.Text &= "-Error: Product Code's first character must be A,  
M or P, either lower or upper case." & vbCrLf

            blnAllValid = False

        End If

        If Not IsNumeric(strProductCode.Substring(1)) Then

            lblDisplayResults.Text &= "-Error: All of the Product Code's characters other  
than the first one must be numeric (0 to 9)" & vbCrLf

            blnAllValid = False

        End If

        If blnAllValid = True Then
            lblDisplayResults.Text = "The Product Code is Valid."
        End If

    End Sub

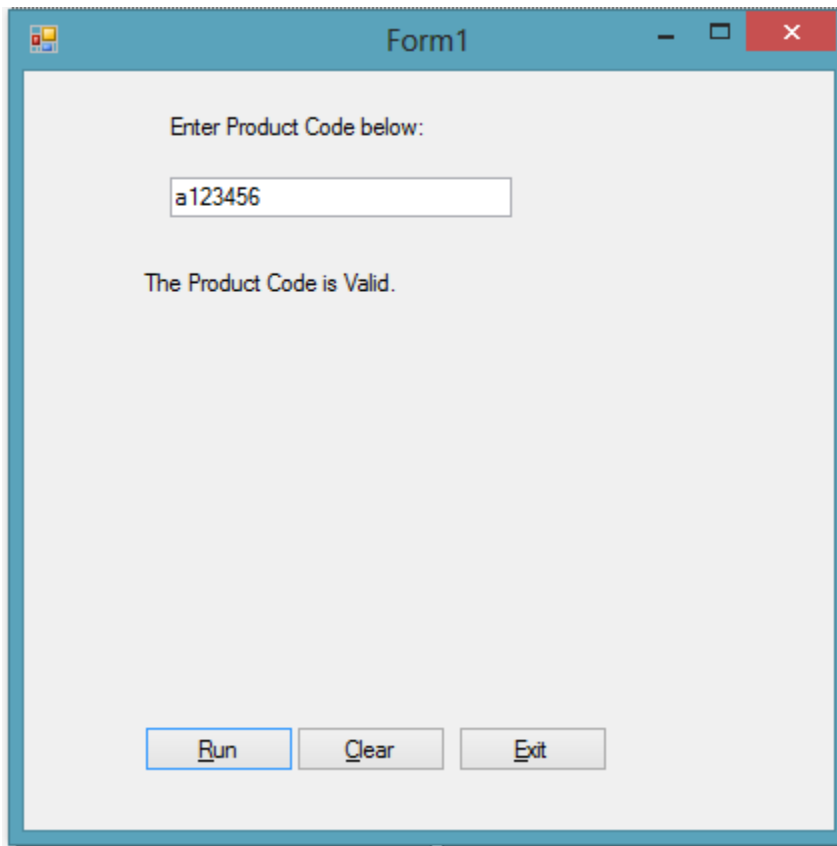
    Private Sub btnClear_Click(sender As Object, e As EventArgs) Handles btnClear.Click
        txtInputProductCode.Clear()
    End Sub

End Class
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        lblDisplayResults.Text = String.Empty

    End Sub

    Private Sub btnExit_Click(sender As Object, e As EventArgs) Handles btnExit.Click
        Me.Close()
    End Sub
End Class
```



The screenshot shows a Windows application window titled "Form1". Inside the window, there is a text label "Enter Product Code below:" followed by a text input field containing the value "a123456". Below the input field, there is a message label that reads "The Product Code is Valid.". At the bottom of the form, there are three buttons: "Run", "Clear", and "Exit". The "Run" button is highlighted with a blue border.

Form1

Enter Product Code below:

bersfx

- Error: Product Code must be minimum 7 or maximum 12 characters
- Error: Product Code's first character must be A, M or P, either lower or upper case.
- Error: All of the Product Code's characters other than the first one must be numeric (0 to 9)

Run Clear Exit

Form1

Enter Product Code below:

bersfxa

- Error: Product Code's first character must be A, M or P, either lower or upper case.
- Error: All of the Product Code's characters other than the first one must be numeric (0 to 9)

Run Clear Exit

Form1

Enter Product Code below:

b123456

-Error: Product Code's first character must be A, M or P, either lower or upper case.

Run Clear Exit

Form1

Enter Product Code below:

Run Clear Exit

Question 2:

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Public Class Form1 'Ilker Hadzhalaran

    Private Sub btnExit_Click(sender As Object, e As EventArgs) Handles btnExit.Click
        Me.Close()
    End Sub

    Private Sub btnClear_Click(sender As Object, e As EventArgs) Handles btnClear.Click
        txtUserInput.Clear()
        lblDisplayResult.Text = String.Empty

    End Sub

    Private Sub btnValidate_Click(sender As Object, e As EventArgs) Handles
btnValidate.Click

        Dim strPhoneNumber
        Dim intIndividualNumber As Integer
        Dim blnPhoneNumberIsValid As Boolean = True

        strPhoneNumber = txtUserInput.Text

        If Not (Integer.TryParse(strPhoneNumber.Substring(1, 1), intIndividualNumber) And
0 < CInt(strPhoneNumber.Substring(1, 1)) <= 9 And CInt(strPhoneNumber.Substring(1, 1)) <>
0) Then

            blnPhoneNumberIsValid = False

        End If

        If Not (Integer.TryParse(strPhoneNumber.Substring(2, 1), intIndividualNumber) And
0 <= strPhoneNumber.Substring(2, 1) <= 9) Then
            blnPhoneNumberIsValid = False
        End If

        If Not (Integer.TryParse(strPhoneNumber.Substring(3, 1), intIndividualNumber) And
0 <= strPhoneNumber.Substring(3, 1) <= 9) Then
            blnPhoneNumberIsValid = False
        End If

        If Not (Integer.TryParse(strPhoneNumber.Substring(6, 1), intIndividualNumber) And
0 <= strPhoneNumber.Substring(6, 1) <= 9) Then
            blnPhoneNumberIsValid = False
        End If

        If Not (Integer.TryParse(strPhoneNumber.Substring(7, 1), intIndividualNumber) And
0 <= strPhoneNumber.Substring(7, 1) <= 9) Then

            blnPhoneNumberIsValid = False

        End If

    End Sub

End Class
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End If

    If Not (Integer.TryParse(strPhoneNumber.Substring(8, 1), intIndividualNumber) And
0 <= strPhoneNumber.Substring(8, 1) <= 9) Then
        blnPhoneNumberIsValid = False

    End If

    If Not (Integer.TryParse(strPhoneNumber.Substring(10, 1), intIndividualNumber)
And 0 <= strPhoneNumber.Substring(10, 1) <= 9) Then

        blnPhoneNumberIsValid = False

    End If

    If Not (Integer.TryParse(strPhoneNumber.Substring(11, 1), intIndividualNumber)
And 0 <= strPhoneNumber.Substring(11, 1) <= 9) Then
        blnPhoneNumberIsValid = False

    End If

    If Not (Integer.TryParse(strPhoneNumber.Substring(12, 1), intIndividualNumber)
And 0 <= strPhoneNumber.Substring(12, 1) <= 9) Then
        blnPhoneNumberIsValid = False

    End If

    If Not (Integer.TryParse(strPhoneNumber.Substring(13, 1), intIndividualNumber)
And 0 <= strPhoneNumber.Substring(13, 1) <= 9) Then

        blnPhoneNumberIsValid = False

    End If

    If Not strPhoneNumber.Substring(0, 1) = "(" Then

        blnPhoneNumberIsValid = False

    End If

    If Not strPhoneNumber.Substring(4, 1) = ")" Then

        blnPhoneNumberIsValid = False

    End If

    If Not strPhoneNumber.Substring(5, 1) = " " Then

        blnPhoneNumberIsValid = False

    End If

    If Not strPhoneNumber.Substring(9, 1) = "-" Then

        blnPhoneNumberIsValid = False

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End If

If blnPhoneNumberIsValid = True Then
    lblDisplayResult.Text = "The phone number is valid"
Else
    lblDisplayResult.Text = "The phone number is not valid"
End If

End Sub
End Class
```

Form1

Enter a phone number of the form (yxx) xxx-xxxx,  
where  $0 \leq x \leq 9$  and  $0 < y \leq 9$

(000) 000-0000

The phone number is not valid

Validate Clear Exit

Form1

Enter a phone number of the form (yxx) xxx-xxxx,  
where  $0 \leq x \leq 9$  and  $0 < y \leq 9$

(100) 000-0000

The phone number is valid

Validate Clear Exit

Form1

Enter a phone number of the form (yxx) xxx-xxxx,  
where  $0 \leq x \leq 9$  and  $0 < y \leq 9$

(123) 456-7899

The phone number is valid

Validate Clear Exit

Form1

Enter a phone number of the form (yxx) xxx-xxxx,  
where  $0 \leq x \leq 9$  and  $0 < y \leq 9$

Validate Clear Exit



Form1

Enter a phone number of the form (yxx) xxx-xxxx,  
where  $0 \leq x \leq 9$  and  $0 \leq y \leq 9$

12345678912345

The phone number is not valid

Validate Clear Exit

Form1

Enter a phone number of the form (yxx) xxx-xxxx,  
where  $0 \leq x \leq 9$  and  $0 \leq y \leq 9$

(123) 456-7891

The phone number is valid

Validate Clear Exit