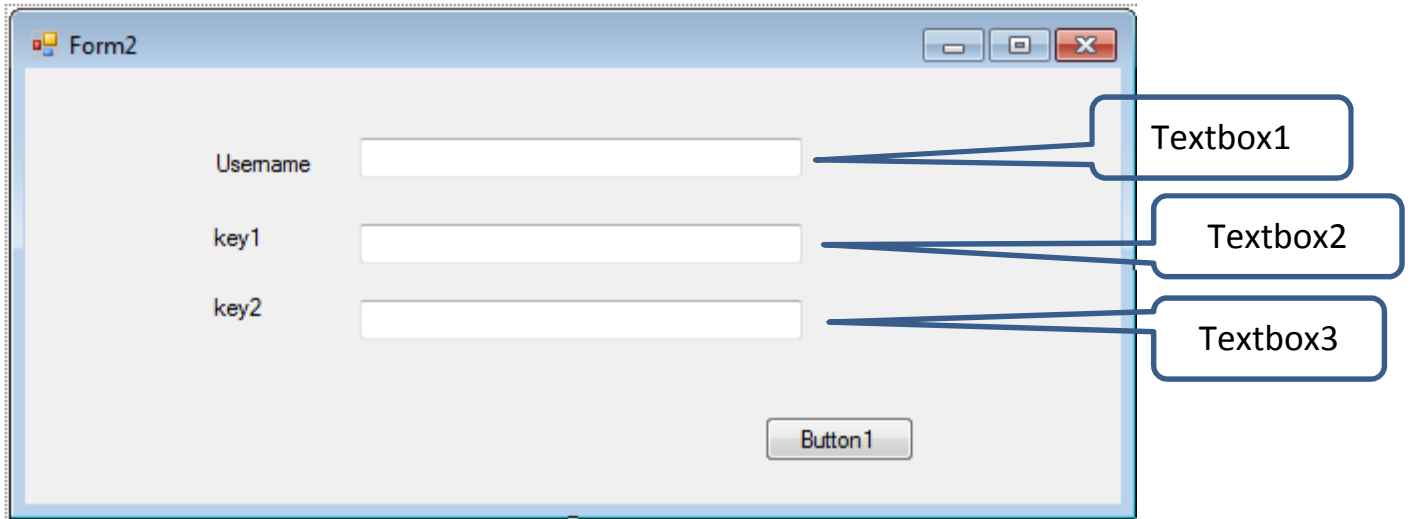


การเขียนโปรแกรมเข้ารหัส/ถอดรหัสข้อมูลแบบสมมาตร ด้วย Visual Basic 2010

1. สร้างโปรเจกต์ใน **Visual Basic 2010**
2. สร้างฟอร์ม ตามภาพ



3. พิมพ์โค้ดดังต่อไปนี้

Option Explicit On

Imports System.Management

Imports System.Net

Imports System.IO

Imports System.Text

Imports System.Data.SqlClient

Imports System.Security.Cryptography

Public Class Form2

Private Shared DES As New TripleDESCryptoServiceProvider

Private Shared MD5 As New MD5CryptoServiceProvider

Public Shared Function MD5Hash(ByVal value As String) As Byte()

Return MD5.ComputeHash(ASCIIEncoding.ASCII.GetBytes(value))

End Function

```

Public Shared Function Encrypt(ByVal stringToEncrypt As String, ByVal key As String) As String
    DES.Key = MD5Hash(key)
    DES.Mode = CipherMode.ECB
    Dim Buffer As Byte() = ASCIIEncoding.ASCII.GetBytes(stringToEncrypt)
    Return Convert.ToBase64String(DES.CreateEncryptor().TransformFinalBlock(Buffer, 0, Buffer.Length))
End Function

Public Shared Function Decrypt(ByVal encryptedString As String, ByVal key As String) As String
Try
    DES.Key = MD5Hash(key)
    DES.Mode = CipherMode.ECB
    Dim Buffer As Byte() = Convert.FromBase64String(encryptedString)
    Return ASCIIEncoding.ASCII.GetString(DES.CreateDecryptor().TransformFinalBlock(Buffer, 0, Buffer.Length))
Catch ex As Exception
    MessageBox.Show("key failed")
    Return ""
End Try
End Function

Private Sub Button1_Click(sender As System.Object, e As System.EventArgs) Handles Button1.Click
    Dim enc As String
    enc = Encrypt(TextBox1.Text, TextBox2.Text)
    MsgBox(enc)
    Dim decry As String
    decry = Decrypt(enc, TextBox3.Text)
    MsgBox(decry)

```

```
' Call savedata()
End Sub
Private Sub savedata()
    Dim constr As String = "Data Source=192.168.10.99;Initial Catalog=student;Persist Security Info=True;User
ID=student;Password=1234"
    Dim commandText As String = "insert into cheawchan (cipher,[key]) values(@cipher,@key)"
    Dim connection As New SqlConnection(constr)
    Dim command As New SqlCommand(commandText, connection)
    command.Parameters.Add("@cipher" , System.Data.SqlDbType.VarChar)
    command.Parameters("@cipher").Value = Encrypt(TextBox1.Text, TextBox2.Text)
    command.Parameters.Add("@key", System.Data.SqlDbType.VarChar)
    command.Parameters("@key").Value = TextBox2.Text
    Try
        connection.Open()
        Dim rowsAffected As Integer = command.ExecuteNonQuery()
    Catch ex As Exception
        MsgBox(ex.Message)
    Finally
        connection.Close()
    End Try
End Sub

End Class
```