



Department of Cyber Security

Block Cipher – Lecture (1Pr)

Second Stage

Simple program

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DEPARTMENT OF CYBER SECURITY

SUBJECT:

SIMPLE PROGRAM

CLASS:

SECOND

LECTURER:

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LECTURE: (1 Pr)



Lecture: Designing a Simple VB.NET Program

1. Introduction

VB.NET (Visual Basic .NET) is a programming language developed by Microsoft, designed to create Windows applications with an easy-to-use graphical interface. It is widely used for developing **desktop applications** and offers a simple way to work with forms, buttons, text boxes, and database connections.

In this lecture, we will **design a simple VB.NET Windows Forms Application** that takes user input and displays it in a label.

2. Learning Objectives

By the end of this lecture, students will be able to:

1. Understand the basics of **Windows Forms Applications** in VB.NET.
2. Design a simple UI using **buttons, text boxes, and labels**.
3. Write simple event-handling code in VB.NET.
4. Run and test a basic VB.NET application.

3. Setting Up the Environment

Before starting, make sure you have:

- **Visual Studio** installed (preferably the latest version).
- **.NET Framework** installed.

4. Creating a Simple VB.NET Windows Forms Application

Step 1: Open Visual Studio and Create a New Project



1. Open **Visual Studio**.
2. Click on "**Create a new project**".
3. Select **Windows Forms App (.NET Framework)**.
4. Name your project (e.g., SimpleVBApp) and click **Create**.

Step 2: Design the User Interface

1. In the **Form Designer**, add the following controls from the **Toolbox**:
 - **Label** (to display a message)
 - **TextBox** (for user input)
 - **Button** (to trigger an action)
 - **Another Label** (to display the entered text)
2. **Set Properties for the Controls**:
 - Change the `Text` property of the first **Label** to "**Enter your name:**".
 - Change the `Name` property of the **TextBox** to `txtName`.
 - Change the `Text` property of the **Button** to "**Show Message**" and set its `Name` to `btnShowMessage`.
 - Change the `Name` property of the second **Label** to `lblMessage` and clear its `Text` property.

Step 3: Writing the Code

1. **Double-click** on the button (`btnShowMessage`), which will open the **code editor**.
2. Add the following code inside the button's `Click` event:

```
Public Class Form1
```

```
Private Sub btnShowMessage_Click(sender As Object, e As EventArgs) Handles  
btnShowMessage.Click
```

```
    ' Get the text from the TextBox and display it in the Label
```

```
    lblMessage.Text = "Hello, " & txtName.Text & "!"
```

```
End Sub
```

```
End Class
```



Step 4: Running the Application

1. Click **Start (F5)** to run the application.
2. Enter a name in the **TextBox** and click the **Show Message** button.
3. The **Label** will display a personalized message like:

Hello, John!

5. Explanation of the Code

- `txtName.Text`: Retrieves the user input from the TextBox.
- `lblMessage.Text`: Updates the Label text to display a greeting.
- **Event Handler** (`Handles btnShowMessage.Click`): Executes the code when the button is clicked.

6. Expanding the Project (Assignment)

To enhance the learning experience, students can:

- Add a **Clear** button to reset the TextBox and Label.
- Add another TextBox for **last name** and modify the greeting message.
- Change the background color when clicking a button.