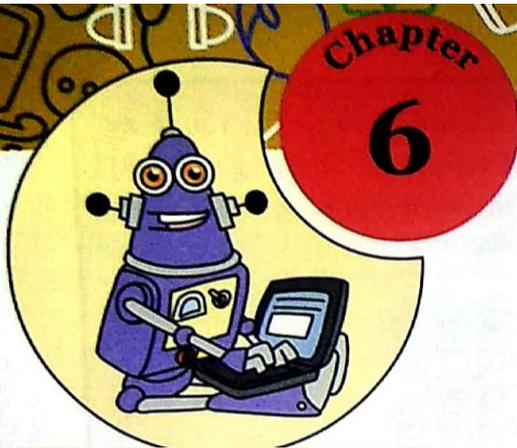


Class -> 8th

Subject -> Computer

Questions & Answers of Chapter 6th

By:- Ankit Sultania



Introduction to Visual Basic

Words to Know

- **Form:** The basic building block on which you place various objects for designing an application.
- **Toolbox:** A component of the Visual Basic Interface that offers various tools, which can be placed on the forms for creating an interface.
- **Controls:** Tools used for designing an interface in Visual Basic.
- **Property:** The characteristics of an object such as colour and size.
- **Method:** An action that can be performed on an object.
- **Event:** An occurrence of some user-generated action applied on an object.
- **Pointer Control:** A control used to move and resize the controls on the form window.
- **Label Control :** A control used to display text or headings on the form.
- **TextBox Control :** A control used for accepting text or numeric values from the user.
- **Button Control :** A control used for initiating some action on the form.

RECAP ZONE



- Visual Basic is a programming language that offers an Integrated Development Environment (IDE) for writing programs.
- An IDE provides a common environment for designing, editing and removing errors in the programs.
- Visual Basic is also referred to as an event-driven programming language.
- The different elements of Visual Basic IDE are Title bar, Menu bar, Toolbar, Main Window, Form window, Toolbox, Solution Explorer and Properties window.
- Every form as well as control has its own set of properties, methods and events.
- There are two views to develop applications in Visual Basic—Designer View and Code View.
- You can run the application by pressing F5, or by choosing Debug ► Start Debugging.



Practice Zone

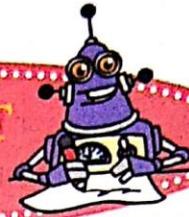
State whether the following statements are True or False.

1. The Property window can display the properties category-wise or in an alphabetic order.
2. A method is an action that can be performed on an object.
3. Label, TextBox, Button, Form have Text property.
4. The Visual Basic IDE provides a common environment for designing, editing and removing errors in the programs.
5. A Form has no events associated with it.
6. The View Code and View Designer buttons are present in the Properties window.

Answers of Practice Zone:

- (1)-True (2)-False (3)-True (4)-True (5)-False
 (5)- False

ASSESSMENT ZONE



A. Choose the correct answer.

1. Identify the correct option for Visual Basic.

a) High level programming language	b) Based on event driven programming
c) Offers Integrated Development Environment	d) All of the above
2. Which of the following is not a property of TextBox control?

a) Caption	b) Text
c) Name	d) Enabled
3. _____ displays a list of various files of a project.

a) Properties window	b) Solution Explorer
c) Toolbox	d) Menu Bar
4. Which of the following best describes a property related to a control?
 - a) A property is a characteristic such as colour and size of an object.
 - b) A property is an action that can be performed on an object.
 - c) A property can be thought of as an occurrence of any activity related to an object.
 - d) None of the above
5. The control that is used to display text or instructions on the form.

a) Label control	b) Textbox control
c) Button control	d) None of these

Answers of Assessment Zone:

A. Choose the correct answer(Answers)

- (1)- (d) All of the above (2)- (a) Caption (3)- (b) Solution Explorer
(4)- (a) A property is a characteristic such as colour and size of an object.
(5)- (a) Label control

B. Fill in the blanks using the words given in the box.

Solution Explorer Designer MaxLength Method IDE

1. An _____ provides a common environment for designing, editing, and removing errors in programs.
2. A _____ is an action that can be performed on an object
3. The _____ window has the View Code and the View Designer buttons.
4. The _____ property of the TextBox control can be used to control the maximum number of characters that can be entered in the TextBox.
5. You can use the _____ view to design the interface of the application by placing various controls on the form.

B. Fill in the blanks(Answers)

- (1)- IDE (2)- Method (3)- Solution Explorer (4)- MaxLength
(5)- Designer

C. Write statements in Visual Basic for the following.

1. Set the title of the form (form name: frmData) to 'Input'
2. Set the contents of a label (label name: lblShow) to 'Display'
3. Disable a textbox (textbox name: txtInterest)

C. Statements in Visual Basic(Answers)

(1) Ans. ->

- Select the Form and Go to Properties window.
- Change the Name property : **frmData**
- Change the Text property : **Input**

(2) Ans. ->

- Select the Label and Go to Properties window.
- Change the Name property : **lblShow**
- Change the Text property : **Dispay**

(3) Ans. ->

- Select the Textbox and Go to Properties window.
- Change the Name property : **txtInterest**
- Change the Enabled property : **False**

D. Answer the following questions.

1. Why is it easy to write programs using Visual Basic as a language?
2. Name the different elements that make up the Visual Basic IDE.
3. Define property, method and event in relation to controls.
4. Discuss the two ways in which you can add controls on a form.
5. Discuss the various ways to run an application.
6. How is Label control different from TextBox control?
7. When do you use Button control? Name some of its properties.

D. Answer the following questions(Answers)

(1) Ans. ->

Visual Basic is a high-level programming language that offers a Graphical User Interface for designing and developing programs as compared to other programming language like QBASIC that offers a text-only environment. So, it is easy to write programs using Visual Basic as a language.

(2) Ans. ->

The different elements that make up the Visual Basic IDE are:

(i) Title bar, (ii) Menu bar, (iii) Toolbar, (iv) Main window, (v) Form window, (vi) Toolbox, (vii) Solution Explorer window, (viii) Properties window, etc.

(3) (a) Ans. ->

Property: A property refers to the characteristics of an object such as colour and size. For example, the BackColor property lets you change the background colour of an object.

Method: A method is an action that can be performed on an object. For example, the Show method is used to display the form and Hide method is used to hide the form from displaying.

Event: An event can be thought of as an occurrence of some user-generated action applied on an object. For example, click event is triggered when an object is clicked using a mouse.

(4) Ans. - >

There are two ways in which you can add controls on the form.

- Select the control in the Toolbox and then drag the control on to the form.
- Double-click the control in the Toolbox. The control gets added in the top-left corner of the form. Drag the control to the desired location on the form.

(5) Ans. - >

To run the application, use any one of the following ways.

- Click the **Start Debugging**  button on the Toolbar, or
- Choose **Debug ▶ Start Debugging**.

(6) Ans. - >

The **Label** control is used to display text on the form. You can use labels for identifying a Textbox or for displaying instructions to the user on the form.

Whereas, The **TextBox** control is used for accepting text or numeric values from the user.

(7) Ans. - >

The **Button** control is similar to push buttons initiating some action on the form. The Button control is used to execute commands, hence, it is very frequently used as a primary control.

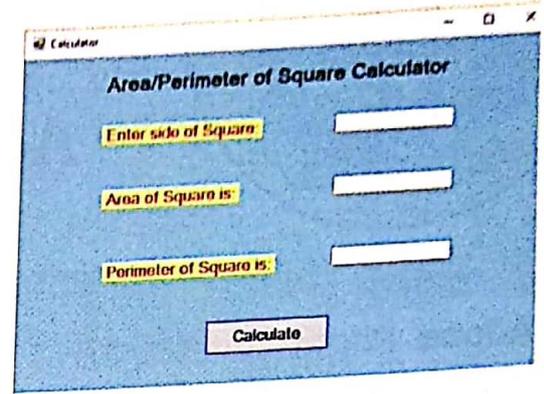
Table below lists some of the properties associated with the Button control

a) Properties	
Property	Description
Name	Sets the name of the Button
Font	Sets the font, font size and font style of the text to be displayed
Enabled	Controls whether the button can respond to user-generated actions or not. Value TRUE implies that you can click the button. Value FALSE implies you cannot click the button and the button appears as disabled.
Text	Specifies the text that appears on a button

HOTS



1. What has been done to set the title of the form as "Calculator"?
2. What is the effect of setting the Enabled property to False (done for Area and Perimeter textbox)?
3. Which property has been used to set the background colour of the Form?
4. Which property has been used to set the text colour of the labels in the form?
5. What code will you write for the Calculate button such that it displays the area and perimeter of the square when clicked, assuming that the names of the textboxes are txtside, txtarea and txtperimeter.



Answers of HOTS:

(1) Ans. ->

- Select the Form and Go to Properties window.
- Change the Text property : **Calculator**

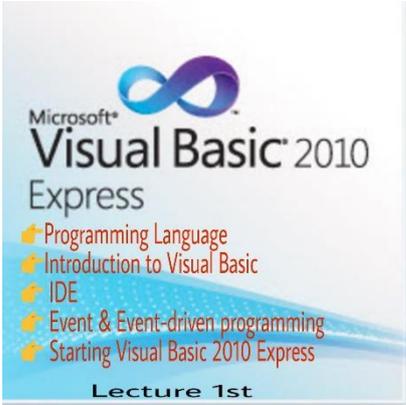
(2) Ans. -> We cannot enter a value and the Textbox **Area and Perimeter** will appear as disabled.

(3) Ans. -> BackColor Property

(4) Ans. -> ForeColor Property

(5) Ans. -> $\text{txtarea.Text} = \text{Val}(\text{txtside.Text}) * \text{Val}(\text{txtside.Text})$
 $\text{txtperimeter.Text} = 4 * \text{Val}(\text{txtside.Text})$

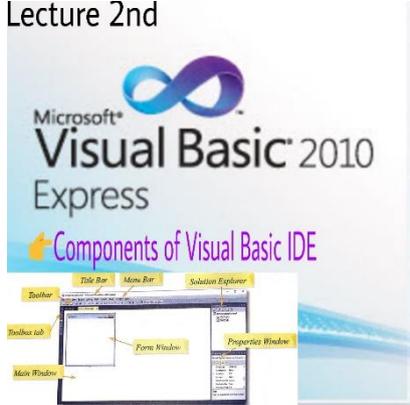
You can also watch all the lecture videos of chapter-6th: Introduction to Visual Basic by clicking on images below:



Microsoft Visual Basic 2010 Express

- Programming Language
- Introduction to Visual Basic
- IDE
- Event & Event-driven programming
- Starting Visual Basic 2010 Express

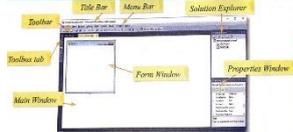
Lecture 1st



Lecture 2nd

Microsoft Visual Basic 2010 Express

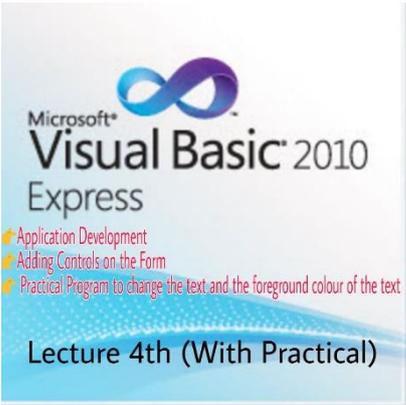
- Components of Visual Basic IDE



Microsoft Visual Basic 2010 Express

- Properties, Methods and Events of:
 - Forms
 - Controls

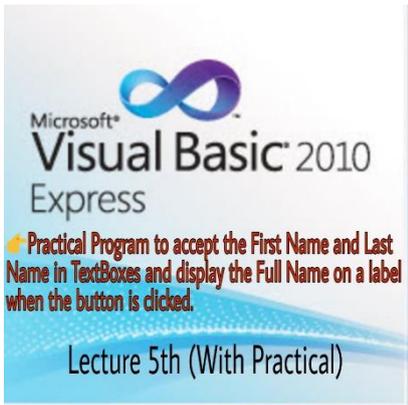
Lecture 3rd



Microsoft Visual Basic 2010 Express

- Application Development
- Adding Controls on the Form
- Practical Program to change the text and the foreground colour of the text

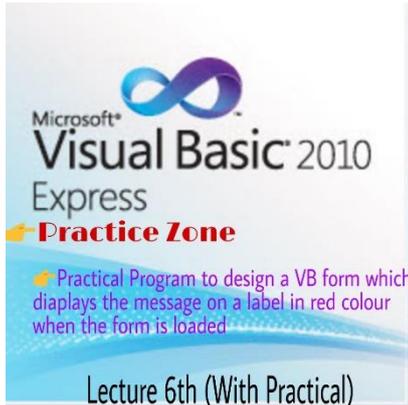
Lecture 4th (With Practical)



Microsoft Visual Basic 2010 Express

- Practical Program to accept the First Name and Last Name in TextBoxes and display the Full Name on a label when the button is clicked.

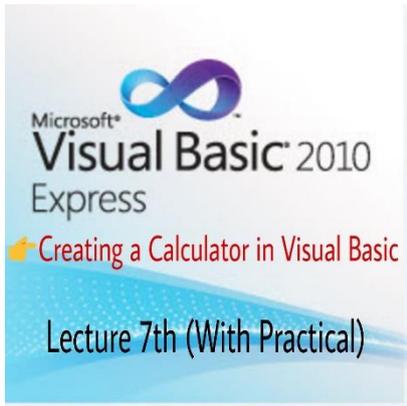
Lecture 5th (With Practical)



Microsoft Visual Basic 2010 Express

- Practice Zone
 - Practical Program to design a VB form which displays the message on a label in red colour when the form is loaded

Lecture 6th (With Practical)



Microsoft Visual Basic 2010 Express

- Creating a Calculator in Visual Basic

Lecture 7th (With Practical)