



<p><b><u>Problem:</u></b> position requires a solution. the objective or specific output that want to attain.</p> <p><b><u>Problem Solving:</u></b> the steps, activities and operations to be done to reach the goal or output</p> <p><b><u>Problem solving stages</u></b></p> <p><b><u>1-: Problem Definition:</u></b> identification of required outputs (results) available inputs, arithmetic and logical operations.</p> <p><b><u>2-: Performing the (Algorithm) solving steps:</u></b></p> <ul style="list-style-type: none"> <li>☞ Algorithm is one of the methods used to solve a problem through logically arranged procedures.</li> <li>☞ a solution plan of a series of successive steps.</li> </ul> <p><b>by drawing “Flowcharts”</b></p> <p><b><u>3-: Program design:</u></b> translate Flowchart (algorithm) to a program by using a programming languages.</p> <p><b><u>4-: Program Testing</u></b> During writing a program we make some mistakes, so we test the program <b><u>by entering data which is known results to the program and compare the results of the current program with it</u></b>, so check the errors then debug (correct) them.</p>	<p><b><u>5-: Program Documentation</u></b></p> <ul style="list-style-type: none"> <li>** write all problem solving stages(inputs- outputs- flowchart-programming language).</li> <li>** date of last modification of the program</li> <li>** people who work in the program.</li> <li>** help to the program development process.</li> </ul> <p><b><u>Its purpose</u></b> ; to go back for feedback and correction.</p> <p><b><u>Flowchart;</u></b> Diagram that uses <b><u>standard graphical symbols</u></b> to illustrate the sequence of steps required for a problem solving or specific question. It is a displaying way for problem solving steps by using <b><u>standard graphical symbols</u></b>.</p> <p><b><u>Features (Benefits) of the flowchart</u></b></p> <ol style="list-style-type: none"> <li>1. Understanding a problem.</li> <li>2. Explains the program to others.</li> <li>3. Coding becomes an easy task for a programmer.</li> <li>4. A Useful tool for documenting a program especially if it is complicated.</li> </ol> <p><b><u>Variable;</u></b> a place in computer memory take a variable value.</p> <p><b><u>Important Notes;</u></b></p> <ul style="list-style-type: none"> <li>☞The flowchart draw on paper or by using computer.</li> <li>☞The variable name used to indicate it content.</li> </ul>	<ul style="list-style-type: none"> <li>☞ In the flowchart, the arrangement of shapes or symbols are very important.</li> <li>☞ Each symbol in the flowchart has a permanent (fixed) meaning.</li> <li>☞ The meaning of each flowchart symbol does not changed from chart to another.</li> <li>☞ The flowchart must be one start and one end with the terminal shape. </li> <li>☞ The inputs (refers to input variables) and outputs (refers to output variables).</li> <li>☞ the <b>variable value</b> may be <b>abstract, variable, property</b> or <b>expression</b> value.</li> <li>☞ The drawing of algorithm (answer/ solution steps) by the flowchart reduces the difficulty of solving the problem.</li> <li>☞ <b><u>What meaning of the process</u></b> ( <b><u>Sum = A + B</u></b> ) is represented, i.e. <b>A, B</b> are input (Variables) and <b>Sum</b> is output (Variable) <b><u>which means</u></b> that the addition of A value to B value and store the result value in Sum variable.</li> <li>☞ The <b><u>left side of variable any equation</u></b> must have only one variable which is the result of (<b><u>Output</u></b>) equation.</li> <li>☞ The Rectangle  shape refers to one or more processes.</li> <li>☞ The <b><u>right side of equation</u></b> may have <b>abstract, variable, property</b> or <b>expression</b> value.</li> <li>☞ The <b><u>normal flow</u></b> of flow lines from up to down and from left to right.</li> </ul>
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### In Branched ( Decision ) flowchart:

- ☞ the decision point has two paths (branches).
- ☞ we can find more than two answers to one question.
- ☞ If the question has more than one answer (2, more), we should use the diamond symbol.





**In looping flowchart:** The number of iterations is known previously.

- ☞ The looping stop when the counter exceeded the maximum value of condition.
- ☞ **The number of iterations = (End-Start) / addition rate + 1 (neglected Decimal value)**
- ☞ **The value of M after the end of the iterative loop equals**

Loop الرقم الذي لا يحقق الشرط وينتهي عمل

The math problem and The preparing of a cup of tea are problems.

### **What the function of the following symbols or shapes ;**

- A) **Terminal**  (Oval Shape) (start, end); used to start and end.
- B) **Parallelogram**  (Input/output); used for entering data (input-read-get-enter) "for variable "and output the result and information (output-print).
- C) **Process**;  used in Process block (Math. Process) or Assignment statement.
- D) **Decision** ;  to represent a question, or Comparison, or Choice with answer **True/False** or **Yes/No**.

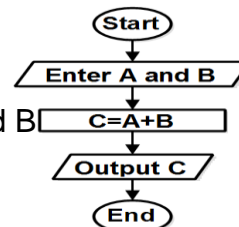
### **A flowchart for calculating the total of two numbers.**

**Output:** The sum of two numbers "C"

**Input:** The first number "A", the second number "B"

**Solution:**  $C = A + B$

1. Start
2. Enter the number A and B
3. calculate  $C = A + B$
4. Print C
5. End



### **A flowchart to Calculate the Product of 3 numbers and their average.**

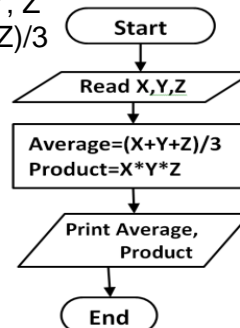
**Define the problem :**

**Output:** The average and product of 3 numbers

**Input:** The 3 numbers X, Y, Z

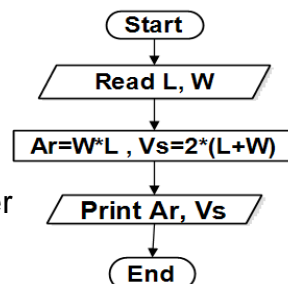
**Solution:**  $\text{Average} = (X + Y + Z) / 3$   
 $\text{Product} = X * Y * Z$

1. Start
2. Read the values X, Y, Z
3.  $\text{Average} = (X + Y + Z) / 3$   
 $\text{Product} = X * Y * Z$
4. Print Average, Product
5. End



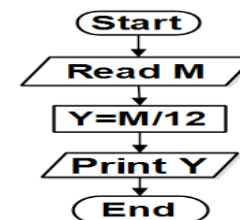
### **A flowchart to calculate the Area (Ar), and the Perimeter (Vs).**

1. Start
  2. Read L, w
  3.  $\text{Area} = W * L$ ,  
 $\text{Perimeter} = 2 * (L + W)$
  4. Print Area, Perimeter
  5. End
- E)



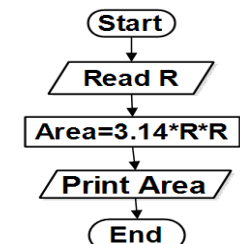
### **A flowchart to calculate the number of years, bearing in mind that the number of months is known.**

1. Start
2. Read the values M
3.  $Y = M / 12$
4. Print Y
5. End



### **A flowchart to calculate the area of a circle**

1. Start
2. Read the values R
3.  $\text{Area} = 3.14 * R * R$
4. Print Area
5. End



### **A flowchart to print "Pass" if the score is greater than or equal 50**

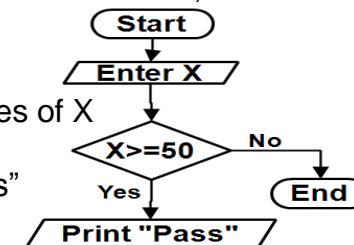
**Define the problem :**

**Output:** print the word "Pass".

**Input:** the score X

**Solution:** If the value of  $X \geq 50$ ; Print "Pass"

- 1) Start
- 2) Enter the values of X
- 3) If  $X \geq 50$  then  
3-1) Print "Pass"
- 4) End



**A flowchart to print "Pass" if the score is greater than or equal 50 and if less than 50 display the message "Fail"**

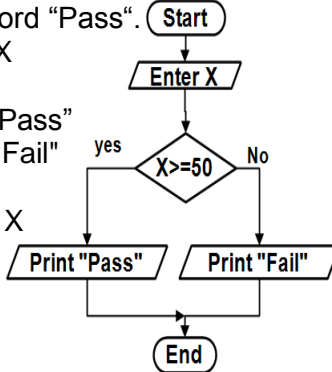
Define the problem :

Output: print the word "Pass".

Input: the score X

Solution: If  $X \geq 50$ ;  
Print the word "Pass"  
and else print "Fail"

- 1) Start
- 2) Enter the values of X
- 3) If  $X \geq 50$  then  
3-1) Print "Pass"
- 4) Else  
4.1) Print "Fail"
- 5) End



**A flowchart to calculate the division of two numbers and display the message "Unknown" if the divisor equal (Zero).**

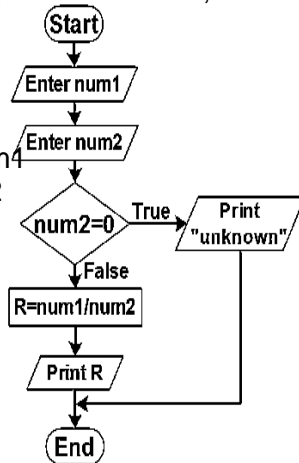
Define the problem

Output : print the result of dividing two numbers "R" or print the word "Unknown".

Input : the dividend is "num1", the divisor is "num2"

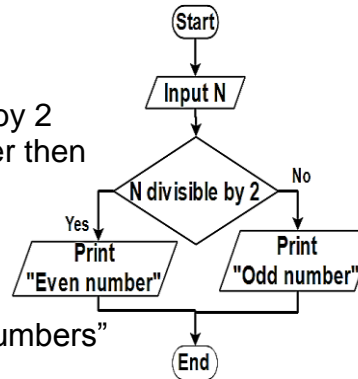
Solution : num2=0 then print "Unknown", otherwise print result of the division "R".

- 1 Start
- 2 Enter the dividend num1
- 3 Enter the divisor num2
- 4 If num2 =0 then  
4-1 Print "Unknown"
- 4-2 Go to step 7
- 5 Else  
 $R = \text{num1} / \text{num2}$
- 6 Print R
- 7 End



**A flowchart to print the number type (even or odd)**

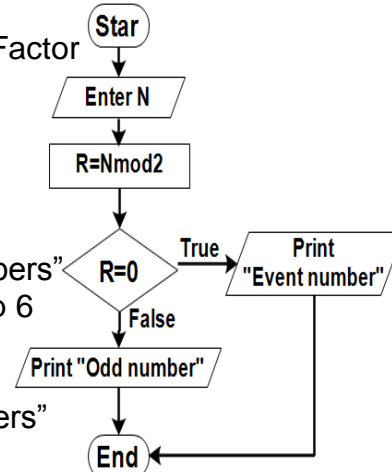
- 1 Start
- 2 Enter N
- 3 If N is divisible by 2 without remainder then  
3-1 Print "even numbers"
- 3-2 Go to step 5
- 4 Else  
4-1 Print "odd numbers"
- 5 End



**A flowchart to print the number type (even or odd)**

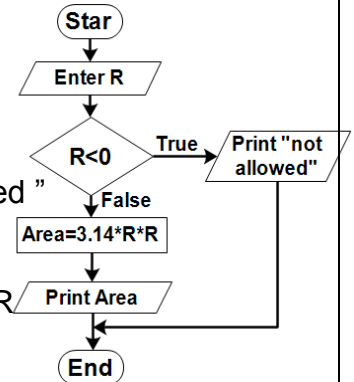
By using mod Factor

- 1 Start
- 2 Enter N
- 3  $R = N \bmod 2$
- 4 If  $R = 0$   
4-1 Print "even numbers"
- 4-2 Go to step 6
- 5 Else  
5-2 Print "odd numbers"
- 6 End



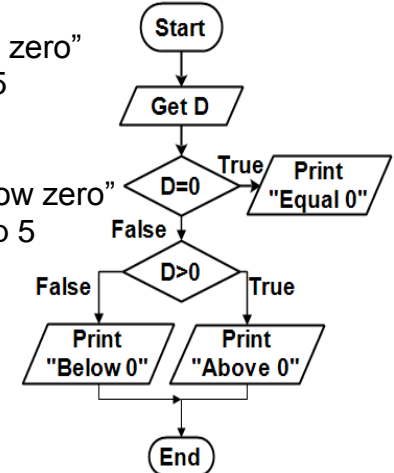
**Flowchart to calculate the Area of a circle whose radius "R", and displays "not allowed" (When the value of "R" is negative).**

- 1 Start
- 2 Enter R
- 3 If  $R < 0$  then  
3-1 Print "not allowed"
- 3-2 Go to step 6
- 4 Else  
 $\text{Area} = 3.14 * R * R$
- 5 Print Area
- 6 End



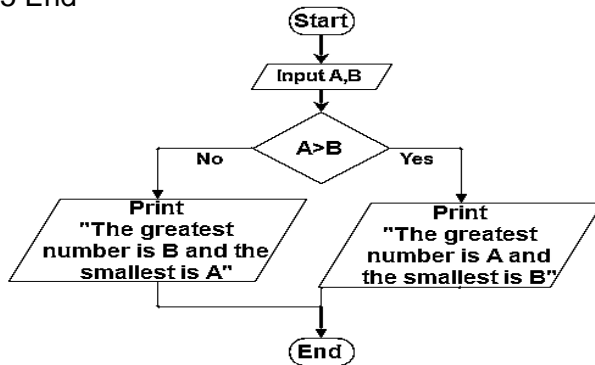
**a flowchart to get temperature degree and print "greater than zero" – "less than zero" – "equal zero"**

- 1 Start
- 2 Enter D (temperature degree)
- 3 If  $D = 0$  then  
3-1 Print "Equal zero"
- 3-2 Go to step 5
- 4 Else  
4-1 if  $D < 0$  then  
4-1-1 Print "Below zero"
- 4-1-2 Go to step 5
- 4-2 Else  
4-2-1 Print "Above zero"
- 5 End



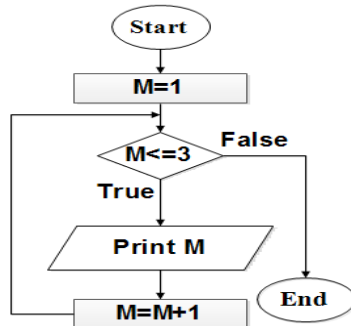
**Read 2 numbers and print the greatest is... and the smallest is ....**

- 1 Start
- 2 Input A,B
- 3  $A > B$ 
  - 3-1 Print "The greatest number is A and the smallest is B"
  - 3-2 Go to step 5
- 4 Else
  - 4-1 Print "The greatest number is B and the smallest is A"
- 5 End



**Print out the (Count) numbers from 1 to 3**

- 1 Start
- 2  $M=1$
- 3 If  $M \leq 3$  then
  - 3-1 Print M
  - 3-2  $M=M+1$
  - 3-3 Go To step(3)
- 4 Else go to step 5
- 5 End



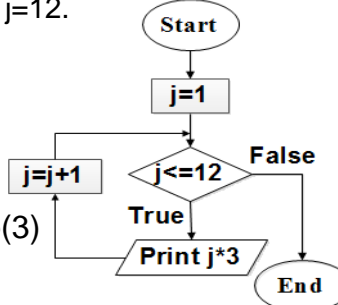
**print the multiplication table of No. 3**

Output : Print the times table 3.

Input : Read the number j

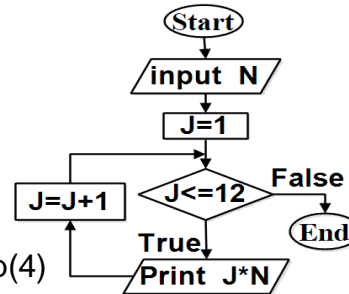
Solution : Print the result of  $(j*3)$ , then add 1 to j until  $j=12$ .

- 1 Start
- 2  $J=1$
- 3 If  $J \leq 12$  then
  - 3-1 Print  $J*3$
  - 3-2  $J=J+1$
  - 3-3 Go To step(3)
- 4 end

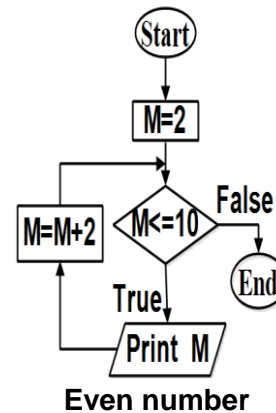
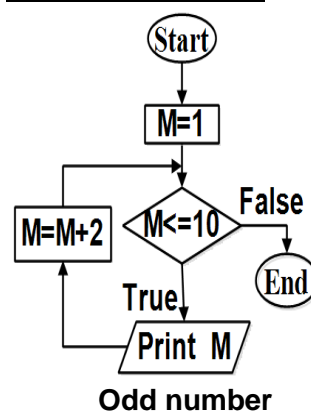


**Enter the required multiplication table (Any times table)**

- 1 Start
- 2 Input N
- 3  $J=1$
- 4 If  $J \leq 12$  then
  - 4-1 Print  $J*N$
  - 4-2  $J=J+1$
  - 4-3 Go To step(4)
- 5 End

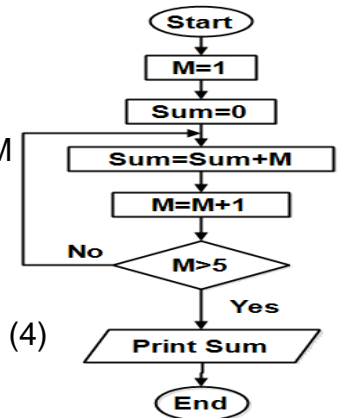


**Flowchart to print out (Count) even or odd number from 1-10.**



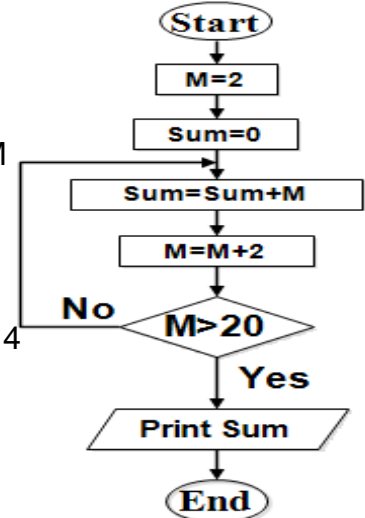
**Print out the sum of integer numbers from 1 to 5**

- 1- Start
- 2-  $M=1$
- 3-  $Sum=0$
- 4-  $Sum = Sum + M$
- 5-  $M=M+1$
- 6- If  $M > 5$  Then
  - 6-1 Print Sum
- 7- Else
  - 7-1 Go to step (4)
- 8- End



**print out the sum even integer numbers from (1) to (20).**

- 1- Start
- 2-  $M=2$
- 3-  $Sum=0$
- 4-  $Sum = Sum + M$
- 5-  $M=M+2$
- 6- If  $M > 20$  Then
  - 6-1 Print Sum
- 7- Else
  - 7-1 Go to step 4
- 8- End



## **Chapter 2**

### **What is Visual Basic.Net?**

It is one of high Level programming Language, so it is easy learn.

### **What is GUI ?**

It is a **Graphical User Interface** and distinguish Windows-based application.

what is meant by **The V.B.Net is an object-oriented language?**

their programs work through objects in computer Memory.

what is meant by **The V.B.Net is an event Driven language?**

- ☞ Their commands and instructions executed by certain event occurs.
- ☞ Their codes and instructions execute upon the occurrence of a particular **event** associated with it.

### **What are the advantages of the Visual Basic.Net?**

- ☞ It is easy to learn.
- ☞ Their codes and instructions write with the English language

### **What are the uses of the Visual Basic.Net?**

- 1 - Windows Applications.
- 2- Web Applications

### **How can create the object?**

By using the commands and instructions of Visual Basic.Net in creating a object

### **What is the properties?**

Description or Characterize the object and determine its features, like (size, color, font, etc).

**What is the event?** It is an actions on the object and is affected and respond to it, like Click event for button.

### **What is the procedure?**

It is the orders and instructions, which execute when calling this procedure.

### **What is the .Net Framework composed?**

- 1) **Libraries, Objects** are created from them.
- 2) **Runtime** called **Operating environment** in computer's memory for running applications produced by the language of Visual Basic.net language.
- 3) **Compilers**; which translates program instructions from high language (English) to machine language (which computer understand it)for a computer to execute.

### **What is the IDE?**

The IDE is shortcut to **Integrated development Environment**, and The visual Studio is IDE.

### **What is the benefits of the IDE for programmers?**

IDE has **tools and features** that Provides the programmer **to create and development** of windows or mobile or web applications.

### **What is the IDE components?**

- 1- Form Window      2- Toolbox Window
- 3- Properties Window   4- Solution Explorer

### **What is the function of Form?**

The form is the interface which the user deals with through different controls.

### **What is the function of Toolbox?**

It contains tools of controls which can be put on the Form and can be shown in categories.

### **What is the Famous category of the Toolbox?**

It is an "All Windows Forms" because it shows all tools of controls.

### **What is the function of properties window?**

It is adjusted properties for Each tool of the Controls which are different according to the **active one** on the IDE screen.

The **property name** found in left column and its **value** found in right column

### **What is the function of solution explorer?**

It shows a list of folders and files of the projects.

### **To (display) or enable/disable;**

#### **1. Properties window;**

🖥 view menu >> properties window

🖥 Keyboard. :      F4 Key

#### **2. solution explorer window;**

🖥 view menu >> solution explorer

### **What is the steps of creating new**

#### **Project?** More than method

- ☞ From **file** menu, select **new project**. **or**
- ☞ From start page , select new project. **or**
- ☞ From Keyboard CTRL+N. **or**  
choose **Windows Form Application**,  
Type the name of project., click **Ok**.

### **What is the steps of adding new form?**

- 1- From **project** menu, select **Add Windows form**.
- 2- **Select Windows Form**.
- 3- **Change the form name** , Then click **Add**.

### **Write the steps to Save the (Project) in one of storage devices?**

- 1- Select (**File**) menu >> select (**Save All**).
- 2- write the **project name** (File name)
- 3- write the **solution name**.
- 4- from **Browse** button, choose the **storage device** on your computer.
- 5- press **Save** button.

### **Notes**

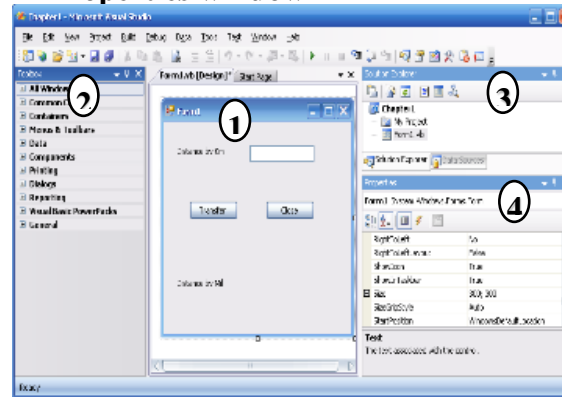
- ☞ When saving the project for the first time its name is similar to the name of solution.
- ☞ The default name of project is **WindowsApplication1**

### **Write the steps to add a new Project to Solution?**

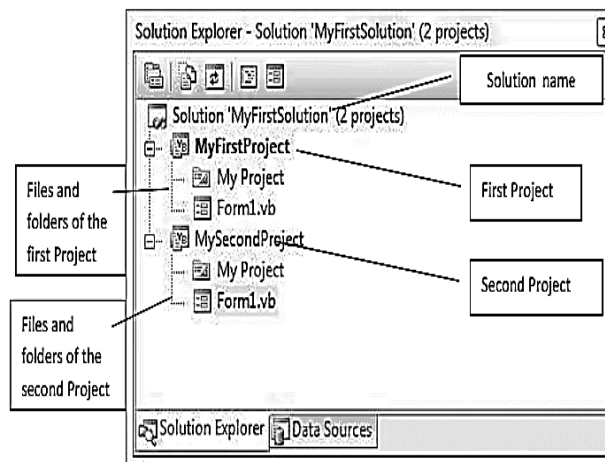
1. Select (**File**) menu
2. select (**Add**) then (**New Project**)

### **IDE window components**

- 1- **Form windows.**
- 2- **Toolbox**
- 3- **Solution Explorer window**
- 4- **Properties window**



### **Solution Explorer Window**



## **Chapter 3**

### **The Role of tools**

#### **What do you know about the Button?**

It is one of Controls which can be placed on the Form. When click it, it does a certain task.

#### **What do you know about the Label?**

It is a tool used in showing (**displaying**) a Text on the Form Window or title for other controls which can't be changed during program Runtime.

#### **What do you know about the Textbox?**

It is a tool used to insert (input) data from the user during program run time.

#### **What do you know about the Listbox?**

To Show a list of items.

#### **What do you know about the ComboBox?**

Displays a drop-down list from which one item can be selected.  
Select one item from the drop down menu in smallest place on form window.

#### **What do you know about the GroupBox? Its benefits.**

is used to group other controls of same function together on the Form window.



**What do you know about the RadioButtons?**

Let's the user select one alternative (option/choice) only from a group of options.

**What do you know about the CheckBox?**

It is used for placing some alternatives to enable the user to select one alternative or more or no selection.

**Compare between Textbox and label?**

**Textbox ;**

1. used to insert (input) data from the user during program run time

**Label**

1. used in showing (**displaying**) a Text on the Form Window  
2. can't be changed during program Runtime.

**Compare between Textbox and Text?**

**Textbox ;**

1. It is a tool.  
2. It used to insert (input) data from the user during program run time

**Text**

1. It is a property.  
2. It appeared Text on ( the title bar of the form Window or the control).

**Compare between Listbox and Combobox?**

**Listbox;**

1. used to Show a list of items.  
2. we can select one or more its elements.  
3. we can't write in it.

**ComboBox ;**

1. It displays a drop-down list from which select one of their elements.  
2. Take a smallest place on form window.  
3. we can write in it.

**Compare between RadioButton and CheckBox?**

**RadioButton;**

Let's the user select one alternative (option/choice) only from a group of options.

**CheckBox ;**

It is used for placing some alternatives to enable the user to select one alternative or more or no selection.

**What the difference between Form and Project and Solution?**

**Form;**

is a part of the **Project**, where the **Project** consists of **one Form** or **more**.

**Project ;**

is a part of the **Solution**, where the **Solution** consists of **one Project** or **more**.

**Solution;**

is a part of the **IDE components**.

**Important Key**

**F4 ; Open (display) Properties window.**

**F5 ; Run (Test debugging) the project.**

**F7 ; Open (display) the Code Window**

**Write short about the function of each property of the following?**

**Name;** Name of Form used in Code Window

**Text ;** The appeared Text on ( the title bar of the form Window or the control).

**Backcolor;** The background color of the Form (control)

**Right to Left ;** The direction of Controls on the form Window From Right to Left

**Right to Left layout ;** The layout of Controls on the Form from right to left.

**MinimizeBox;** It controls the appearance or disappearance of MinimizeBox of Form Window.

**MaximizeBox;** It controls the appearance or disappearance of MaximizeBox of Form Window.

**ControlBox ;**It controls the appearance or disappearance of **ControlBox** of Form Window.

**FormBorderStyle** ; The Border style of Form Window.

**WindowState** ;It defines the Window State of the **Form** (Maximizing, Minimizing or normal).

**Location** ; The location of placing **Button** on the Form.

**Size** ; Defining the height and width of Button on the Form.

**Text** ; The appeared Text on the Button

**BackColor** ; Choosing the backColor of the Button.

**Font** ; Defining (shape ,size and style) of the Text font appeared on the Button.

**ForeColor** ; Choosing the ForeColor to the appeared Text on the Button

**AutoSize**; The Size of the Label is defined automatically according to the written Text if the Value of property equals true.

**BorderStyle**; Choosing the Border Style of the **Label** (control-tool)

**MaxLength**; It defines the maximum number of letters which can be inserted in the **TextBox**

**PasswordChar**; It defines a symbol used instead of written text in case we have a password.

**Multiline** ; allows multiple lines within the text box control tool.

**Items** ; A group of items shown in the **ListBox** or **comboBox**

**Sorted** ; It defines whether the elements in the **list** are sorted or not.

**Checked** ; It shows whether tool has been chosen (**selected**) or not.

**SelectionMode**; It defines whether it is possible to choose one item or more shown in the **ListBox**.

**AutoCompleteSource** ; It is a source of suggested items to select in completing process for **ComboBox** tool.

**AutoCompleteMode** ; It defines the method of list completing process for **ComboBox** tool.

### **Explain the following...?**

1- **The appearance of form window full screen during running the program.**  
Because the property **Windows State** take a value **maximize**.

2- **The form window appears without Borders.**

Because the property **FormBorderStyle** take a value **None**.

3- **Disappearance of ControlBox of the title of Form Window in run mode.**  
Because the property **ControlBox** take a value **False**.

**The appearance of form window with red color.**

Because the property **BackColor** take a value **red**.

### **The properties values and its effect**

Property	The value take	effect
<b>Name</b>	Take the prefix <b>frm</b> , <b>txt</b> , <b>btn</b> , <b>lbl</b> (any En.name).	Design
<b>Text</b>	Any text or number or mix	Design , Running
<b>BackColor</b>	Color value	Design , Running
<b>ForeColor</b>	Color value	Design , Running
<b>Font</b>	Font, Size and Style value	Design , Running
<b>FormBorderStyle</b>	Non-Sizable	Design , Running
<b>WindowState</b>	maximized minimized normal	Running mode
<b>ControlBox</b>	True - False	Design , Running
<b>MinimizedBox</b>	True - False	Design , Running
<b>MaximizedBox</b>	True - False	Design , Running
<b>RightToLeftLayout</b>	True - False	Design , Running
<b>RightToLeft</b>	Yes - No	Design , Running
<b>Location</b>	X; y Width ; height	Design , Running
<b>Enabled</b>	True - False	Design , Running



### The properties values and its effect

Property	The value take	effect
MaxLength	Max value 32767	Running
Multiline	False (write in one line) True (write in multiline; adjust the size manually)	Running
Password Char	Write one character	Running
Items	Open Editor Box (write each item in separate line)	Design Running
Sorted	True ( sort alphabetically arranged) False ( unordered or not arranged)	Design Running
Selection Mode	None; no one choose One; select one MultiSimple , multiExtended	Running
AutoCompleteSource	Many choose (listitems)	Running
AutoCompleteMode	Many choose None; "not display any suggestions" suggest ; "by begging of writing user"	Running
Checked	True False	Running
Visible	True or Fals	Design , Running
BoderStyle	None, FixedSingle or Fixed3D	Design , Running
Autosize	Automatic size	Design , Running
Size	Width ; hight	Design , Running

### Explain the following...?

- The appearance of the Maximize Button in the title bar but not active.**  
Because the property **Maximize** take a value **False**.
- The appearance of the text on title bar for form in right direction.**  
Because the property **RightToLeft** take a value **True**.
- By running the program the ControlBox appears in the left direction.**  
Because the property **RightToLeft Layout** take a value **True**.
- Eight squares appear on the borders of the Button.**  
You can **change the size** of the Button by using the process of **drag and drop** using the pointer of the mouse through the eight squares.
- Text color on the Button appeared red.**  
Because the property **ForeColor** take a value **red**.
- We can't change the size of label1 control.**  
Because the property **AutoSize** take a value **True**.
- Eight squares appear on the borders of the label control.**  
Because the property **AutoSize** take a value **False**.

- 8-By writing in Textbox tool the symbol \*\*\*\*\* appears.

Because the property **PasswordChar** take a value **\***.

- 9-We can't write more than one line in textbox tool.

Because the property **Multiline** take a value **False**.

- 10- We can't write more than 10 characters in textbox tools.

Because the property **Maxlenght** take a value **10**

- 11- The elements appears in Listbox unsorted.

Because the property **Sorted** take a value **False** .

- 12- By using the Listbox tool, we can select more than one element.

Because the property **SelectionMode** take a value **MultiExtended** .

- 13- By writing in ComboBox tool , can't display any suggestions.

Because the property **AutoCompleSource** and **AutoCompleMode** take a value **None**.

- 14- The Checkbox appears selected.

Because the property **Checked** take a value **True** .

**Explain the following...?**

- 15- **One square appear on label tool.**  
Because the property **AutoSize** take a value **True**.
- 16- **Two squares appear on the textbox tool.**
- ☞ The property **multiline** take the value **False**.
  - ☞ The size changed vertical only due to the writing is in one line

**Chapter 4**

**Define the code window?**

is a place to write instructions and codes using (Visual Basic.Net) language.

**Write different steps of open code window?**

- 1- **View** menu, select **Code**.
- 2- Press (**F7**) from the keyboard.
- 3- In **solution explorer**, from short cut menu of form, select **View code**
- 4- **Double click on any control (tool)** on the form window.

**Define the Event Handler?**

It's a procedure which contains a code that is carried out when a corresponding event occurs, and **it's name (Procedure name)** is (**control** and **Event name**).

**What is A drop-down menu of (Class Names)?**

displays the names of controls which found on the form.

**What is A drop-down menu of (Method Names) or events**

displays the events/methods associated with the item selected from the (**Class Names**) menu.

**What is the syntax for adjusting the properties programmatically?**

ControlName.Property=Value

**What the result of the following**

- 1- **The property Text take the value تحيا مصر for button1 tool.**  
( **Button1.text="تحيا مصر"** )  
the word تحيا مصر appears on the button1.
- 2- **The property BackColor take the value Red for the form1.**  
( **Form1.BackColor=Color.Red** )  
The background color of form1 is Red.
- 3- **The property ForeColor take the value Yellow for label1.**  
( **Label1.foeColor=Color.Yellow** ) The color of text appeared on the label1 is Yellow.

- 4- **The property RightToLeft take the value True for the current Form1.**

( **Form. RightToLeft=True** )

The direction of Controls on the form Window From Right to Left

- 5- **The property FormBorderStyle take the value None for the form1.**

( **From1. FormBorderStyle=None** )

There is no Border appeared around the form1 window.

- 6- **The property MaximizedBox take the value False.**

( **Me. MaximizedBox=False** )

The MaximizedBox appeared but not active for the **current form**.

- 7- **The properties MaximizedBox and minimizedBox take the value False.**

( **form1.MaximizedBox=False** )

The MaximizedBox and minimizedBox are disable (invisible/hide) for form1.

- 8- **The property ControlBox take the value False.**

( **Me.ControlBox=False** )

The ControlBox is hide for the current form.

- 9- **The property WindowsState take the value Maximized.**

( **Me.WindowsState=Maximized** )

The current Form window appears in full screen mode.

10- **The property ForeColor take the value Blue for the button1 tool.**

**Button1.ForeColor=Blue**

The text on button1 is appeared Blue.

11- **The property Autosize take the value False for the tool.**

**Label1.Autosize=False**

We can adjust the size of Tool manually.

12- **The property Maxlenght take the value**

**Textbox1.Maxlenght=10**

We can't write more than 10 characters in textbox1 tool.

13- **The property PasswordChar take the value # for the textbox1 tool.**

**Textbox1.PasswordChar="#"**

By writing in Textbox tool the symbol ##### appears

14- **The property MultiLine take the value true for the Textbox1 tool.**

**Textbox1.MultiLine= true**

We can write in Textbox tool in more than one line (multi-lines).

16- **The property Sorted take the value true for the ..... tool.**

**ListBox1.Sorted=true**

**ComboBox.Sorted=true**

The element in List (Tool) is ordered (arranged).

17- **The property SelectionMode take the value One for the Listbox1 tool**

**Listbox1.SelectionMode=One**

We can select one element from listbox1.

18- **The property Checked take the value True for the tool.**

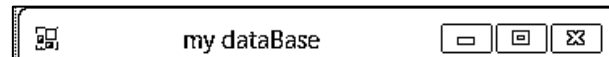
**RadioButton.Checked=True**

**CheckBox.Checked=True**

The Checkbox appears selected

The RadioButton appears selected

**Look the shape and answer about**

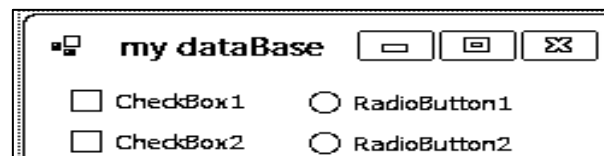


1) The property used; **Text**

2) The property value; **My database**

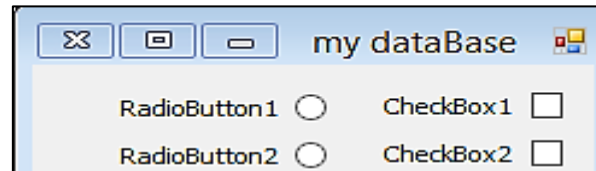
1) The property used; **ControlBox**

2) The property value; **True**



1) The property used; **RightToLeft**

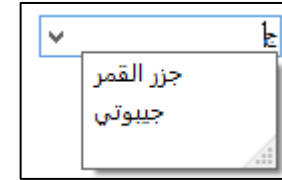
2) The property value; **No**



1) The property used;

**RightToLeftLayout**

2) The property value; **True**



1) The property used;

**AutoCompleMode**

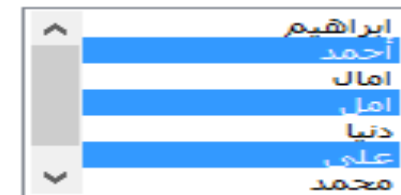
2) The property value; **Suggest.**

1) The property used; **Items**

2) The property value; **جزر القمر و جيبوتي.**

1) The property used; **Sorted**

2) The property value; **True.**



1) The property used; **Selection Mode**

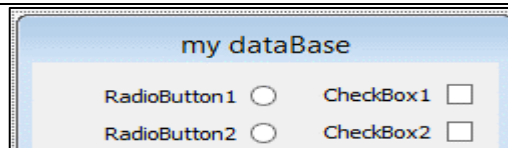
2) The property value; **Multi Extended.**

1) The property used; **Items**

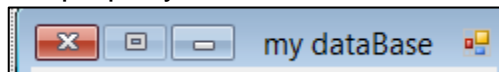
2) The property value; **ابراهيم و أحمد و .....و.**

1) The property used; **Sorted**

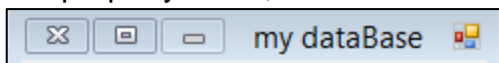
2) The property value; **True.**



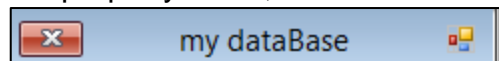
- 1) The property used; **ControlBox**
- 2) The property value; **False**



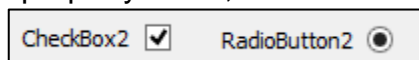
- 1) The property used; **Maximize Box**
- 2) The property value; **False**



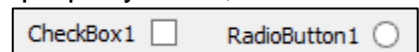
- 1) The property used; **Minimize Box**
- 2) The property value; **False**



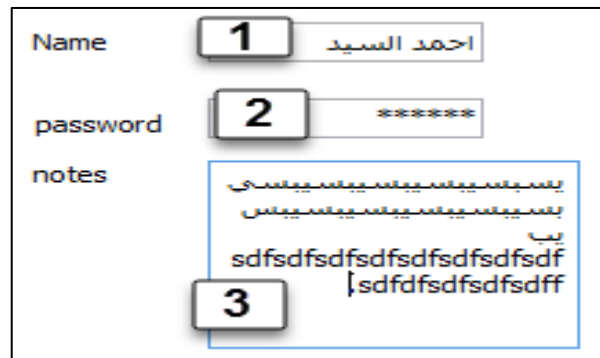
- 1) The property used; **Minimize Box**  
**Maximize Box**
- 2) The property value; **False**



- 1) The property used; **Checked**
- 2) The property value; **true**



- 1) The property used; **Checked**
- 2) The property value; **False**

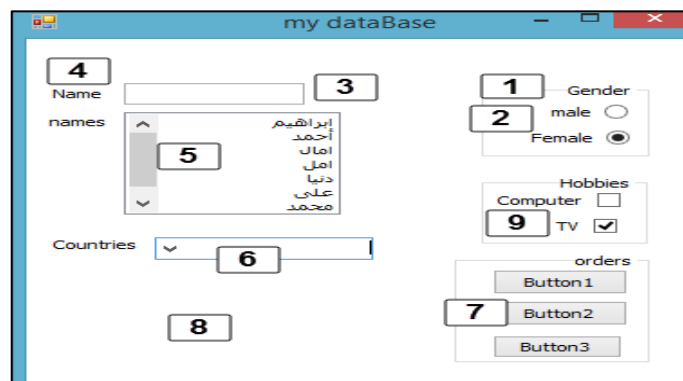


The property is **RightToLeft = Yes**

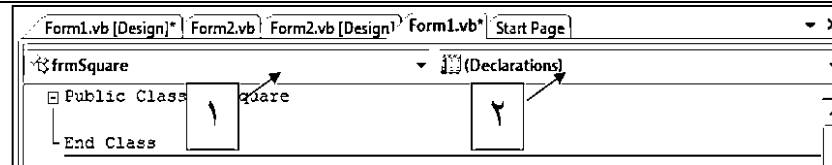
- 1) The Control used; **TextBox**

The property is **Multiline = False**.

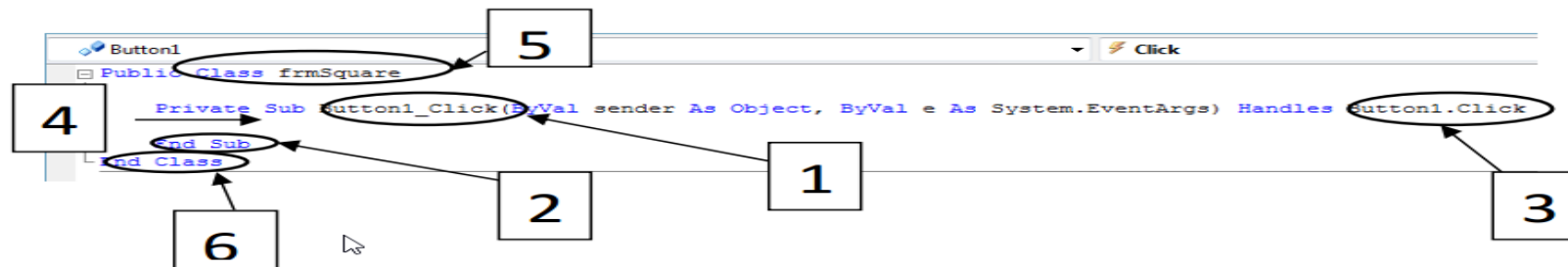
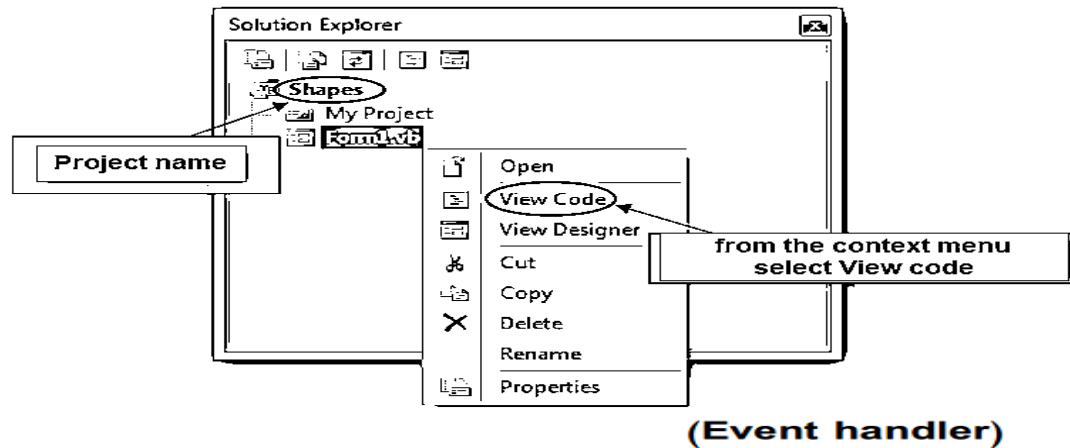
- 2) The property is **PasswordChare = \***.
- 3) The property is **Multiline = True**.



- 1- **GroupBox tool.**
- 2- **RadioButton tool.**
- 3- **TextBox tool.**
- 4- **Label tool.**
- 5- **ListBox tool.**
- 6- **ComboBox tool.**
- 7- **Button tool.**
- 8- **Form Window.**
- 9- **CheckBox tool.**



- (1) A drop-down menu of (**Class Name**), which refers to the name of controls placed on the Form.
- (2) A drop-down menu of (**Method Name**) or **events**; associated with the control selected from the (**Class Name**) menu.



The numbers shown in figure (4-7) indicate:

- (1) The procedure name composed of (object name, event name).
- (2) End of procedure line.
- (3) What causes the call of the procedure (event occurrence) .
- (4) Between the two lines shown; the code that will be executed on calling the procedure is written after the occurrence of the (Event
- (5) The declaration of the class line (frmSquare)
- (6) The end of (class) line.