Problem; position requires a solution.
the objective or specific output that want to attain.

Problem Solving;
the steps, activities and operations to be done to reach the goal or output

Problem solving stages

1-: *Problem Definition*:
identification of required outputs (results) available inputs, arithmetic and logical operations.

2-: *Performing the (Algorithm) solving steps*:

- Algorithm is one of the methods used to solve a problem through logically arranged procedures.
- a solution plan of a series of successive steps.

by drawing "*Flowcharts*"

3-: *Program design*:
translate Flowchart (algorithm) to a program by using a programming languages.

4-: *Program Testing*
During writing a program we make some mistakes**,** so we test the program **by entering data which is known results to the program and compare the results of the current program with it,** so check the errors then debug (correct) them.

5-: *Program Documentation*
** write all problem solving stages(inputs-outputs- flowchart-programming language).
** date of last modification of the program
** people who work in the program.
** help to the program development process.

Its purpose ; to go back for feedback and correction.

Flowchart;
Diagram that uses **standard graphical symbols** 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 **standard graphical symbols.**

Features (Benefits) of the flowchart
1. Understanding a problem.
2. Explains the program to others.
3. Coding becomes an easy task for a programmer.
4. A Useful tool for documenting a program especially if it is complicated.

Variable; a place in computer memory take a variable value.

Important Notes;
- The flowchart draw on paper or by using computer.
- The variable name used to indicate it content.
- In the flowchart, the arrangement of shapes or symbols are very important.
- Each symbol in the flowchart has a permanent (fixed) meaning.
- The meaning of each flowchart symbol does not changed from chart to another.
- The flowchart must be one start and one end with the terminal shape.
- The inputs (refers to input variables) and outputs (refers to output variables).
- the **variable value** may be **abstract**, **variable**, **property** or **expression** value.
- The drawing of algorithm (answer/ solution steps) by the flowchart reduces the difficulty of solving the problem.
- ***What meaning of the process*** (***Sum = A + B***) is represented, i.e. **A, B** are input (Variables) and **Sum** is output (Variable) **which means** that the addition of A value to B value and store the result value in Sum variable.
- The **left side of variable any equation** must have only one variable which is the result of (**Output**) equation.
- The Rectangle shape refers to one or more processes.
- The **right side of equation** may have **abstract**, **variable**, **property** or **expression** value.
- The **normal flow** of flow lines from up to down and from left to right.

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 الذى لا يحقق الشرط وينهى 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**.

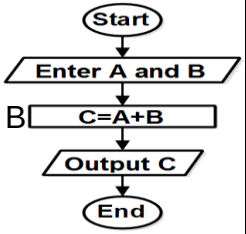
A flowchart for calculating the total of two numbers.

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.

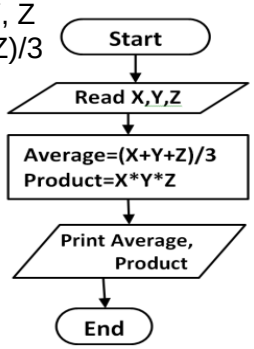
Define the problem ;

Output: The average and product of 3numbers

Input: The 3 numbers X, Y, Z

Solution: Average =(X+Y+Z)/3
Product= X*Y*Z.

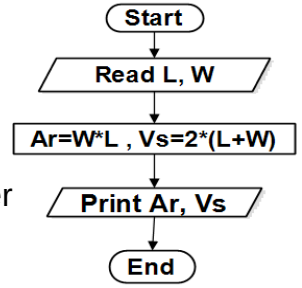
1.Start
2.Read the values X,Y,Z
3.Average=(X+Y+Z) / 3
Product=X*Y*Z
4.Print Average , Product
5.End



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

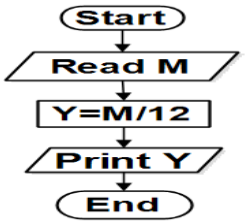
1.Start
2.Read l, w
3.Area=W*L , Perimeter=2*(L+W)
4.Print Area, Perimeter
5.End

E)



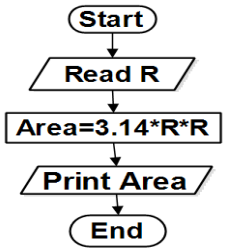
A flowchart to calculate the number of years, bearing in mind that the number of months is known.

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.Area=3.14*R*R
4.Print Area
5.End



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

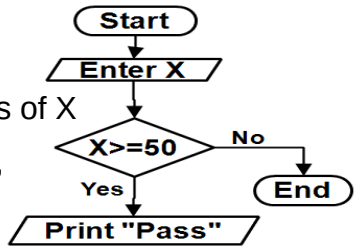
Define the problem ;

Output: print the word "Pass".

Input: the score X

Solution: If the value of X>= 50; Print "Pass"

1) Start
2) Enter the values of X
3) If X> =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".

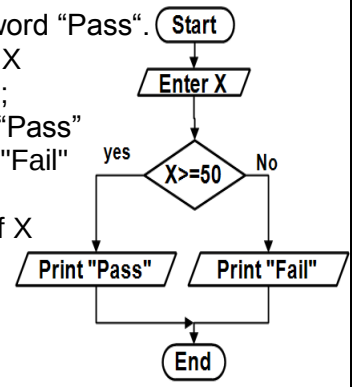
Input: the score X

Solution: If X>= 50;

Print the word "Pass"

and else print "Fail"

1) Start
2) Enter the values of X
3) If X> =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**).

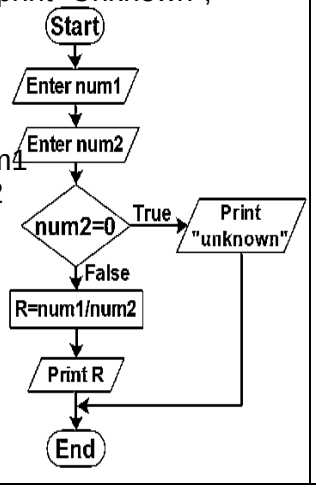
Define the problem

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

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

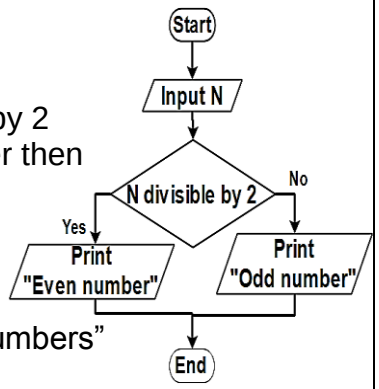
Solution : num2=0 then print "Unknown", otherwise print result of the division "R".

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=num1/num2
6 Print R
7 End



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

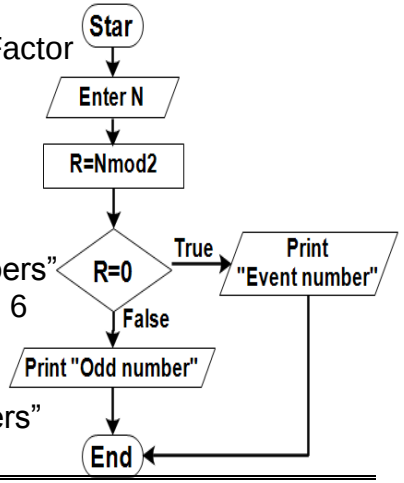
1 Start
2 Enter N
3 If N is divisible by 2 without remainder then
   3-1 Print "even numbers"
   3-2 Go to step 5
4 Else
   4-1 Print "odd numbers"
5 End



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

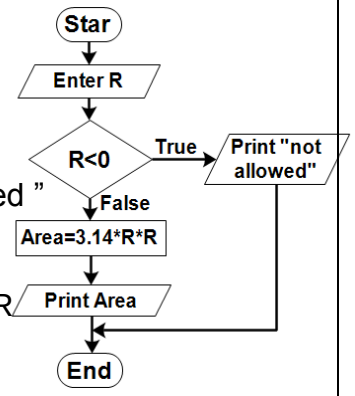
By using mod Factor

1 Start
2 Enter N
3 R=Nmod2
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
   Area=3.14*R*R
5 Print Area
6 End



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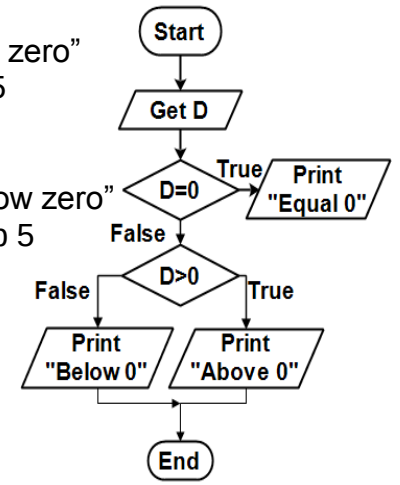
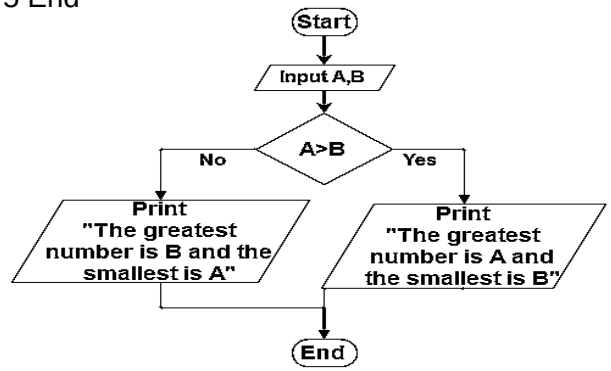
a flowchart to get temperature degree and print "greater than zero" – "less than zero" – "equal zero"

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



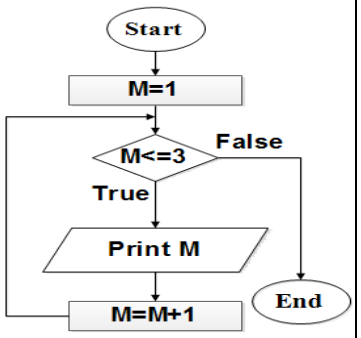
Read 2 numbers and print the greatest is… and the smallest is ….

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

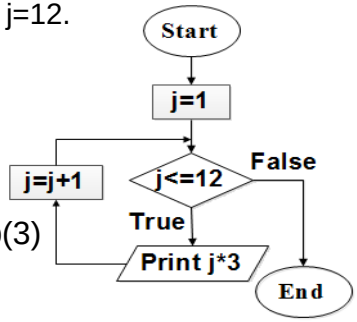
1 Start
2 M=1
3 If M<=3 then
 3-1 Print M
 3-2 M=M+1
 3-3 Go To step(3)
4 Else go to step 5
5 End



print the multiplication table of No. 3

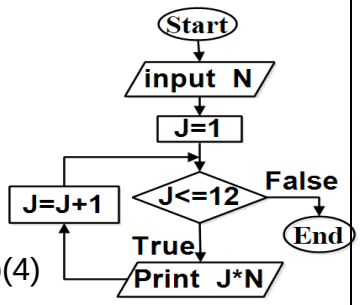
Output :Print the times table 3.
Input :Read he number j
Solution : Print the result of (j*3) , then add 1 to j until j=12.

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

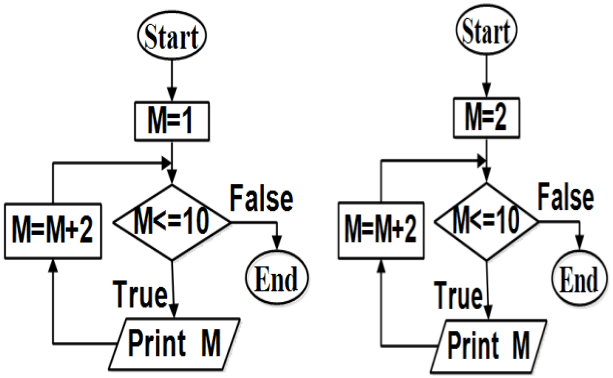


Enter the required multiplication table (Any times table)

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

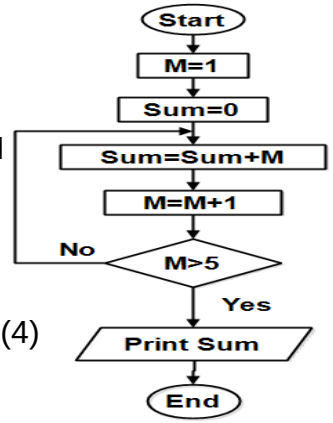


Flowchart to print out (Count) even or odd number from 1-10.



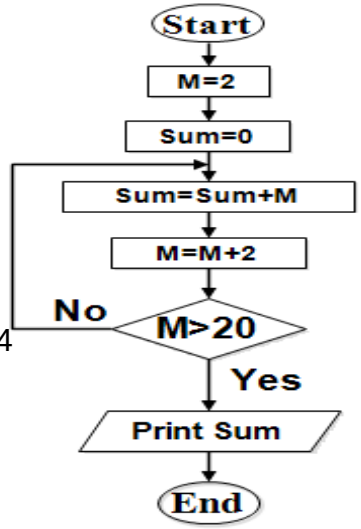
Print out the sum of integer numbers from 1 to 5

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

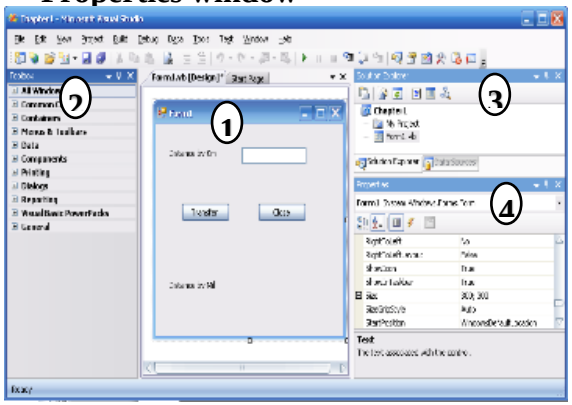
- **When saving the project for the first time its name is similar to the name of solution.**
- **The default name of project is WindowsApplication1**

Write the steps to add a new Project to Solution?

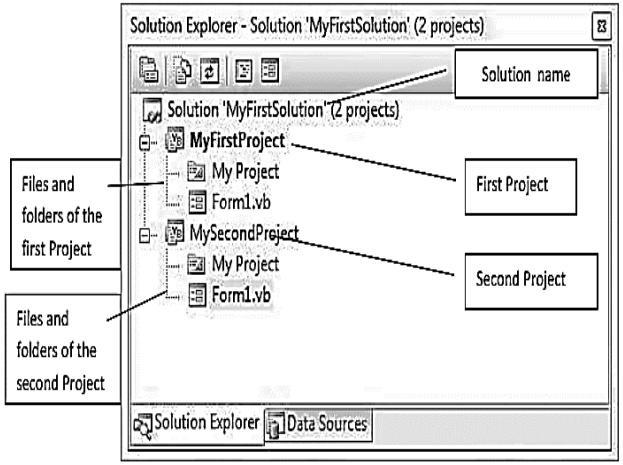
1. Select (**File**) menu
2. select (**Add**) then (**New Project**)

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
Name	Take the prefix **frm**, **txt**, **btn**, **lbl** (any En.name).	Design
Text	Any text or number or mix	Design , Running
BackColor	Color value	Design , Running
ForeColor	Color value	Design , Running
Font	Font, Size and Style value	Design , Running
FormBorderStyle	Non-Sizable	Design , Running
WindowsState	maximized minimized normal	Running mode
ControlBox	True - False	Design , Running
MinimizedBox	True - False	Design , Running
MaximizedBox	True - False	Design , Running
RightToLeftLayout	True - False	Design , Running
RightToLeft	Yes - No	Design , Running
Location	X; y Width ; hight	Design , Running
Enabled	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...?

1- **The appearance of the Maximize Button in the title bar but not active.**
Because the property **Maximize** take a value **False**.

2- **The appearance of the text on title bar for form in right direction.**
Because the property **RightToLeft t**ake a value **True**.

3- **By running the program the ControlBox appears in the left direction.**
Because the property **RightToLeft Layout** take a value **True**.

4- **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.

5- **Text color on the Button appeared red.**
Because the property **ForeColor** take a value **red**.

6- **We can't change the size of label1 control.**
Because the property **AutoSize** take a value **True**.

7- **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 **AutoCompletSource** and **AutoCompletMode** 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 Maximized**Box and minimizedBox** are disable (invisible/hide) for form1.

8- **The property ControlBox take the value False.**
Me.ControlBox=False
The Control**Box** 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.**

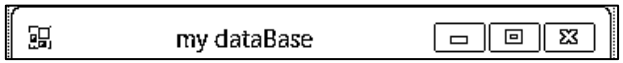
RadioButton.Checked=True

CheckBox. Checked=True

The Checkbox appears selected

The RadioButton appears selected

Look the shape and answer about

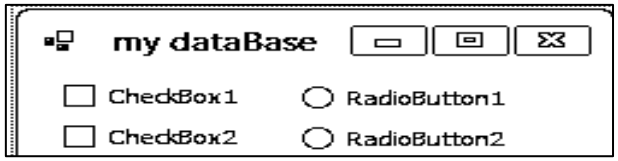


1) The property used; **Text**

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

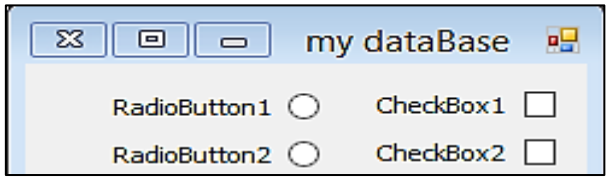
1) The property used; **ControlBox**

2) The property value; **True**



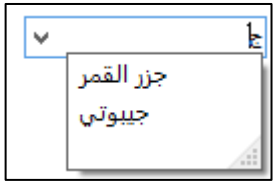
1) The property used; **RightToLeft**

2) The property value; **No**



1) The property used; **RightToLeftLayout**

2) The property value; **True**



1) The property used; **AutoCompletMode**

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

1) The property used; **Items**

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

1) The property used; **Sorted**

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

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

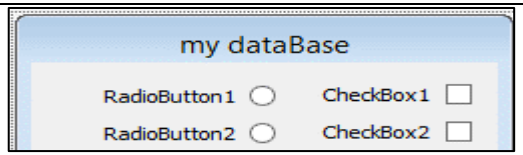
2) The property value; **Multi Extended.**

1) The property used; **Items**

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

1) The property used; **Sorted**

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

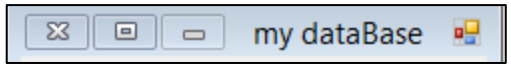


1) The property used; **ControlBox**

2) The property value; **False**

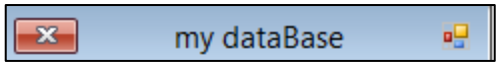
1) The property used; **Maximize Box**

2) The property value; **False**



1) The property used; **Minimize Box**

2) The property value; **False**



1) The property used; **Minimize Box**
Maximize Box

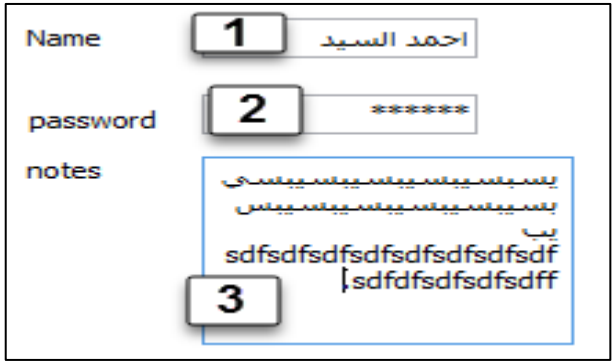
2) The property value; **False**

1) The property used; **Checked**

2) The property value; **true**

1) The property used; **Checked**

2) The property value; **False**



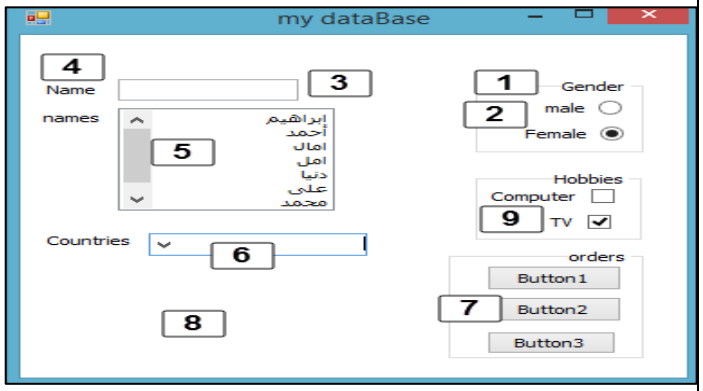
The property is **RightToLeft = Yes**

1) The Control used; **TextBox**

The property **is Multiline = False .**

2) The property **is PasswordChare = * .**

3) The property **is Multiline = True .**



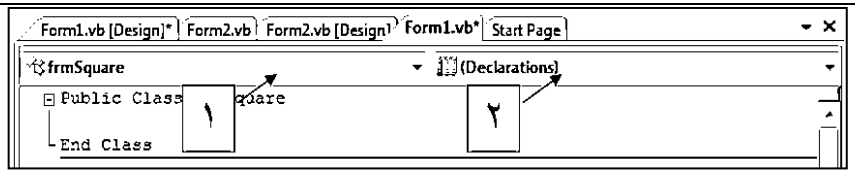
1- **GroupBox tool.** **2- RadioButton tool.**

3- TextBox tool. **4- Label tool.**

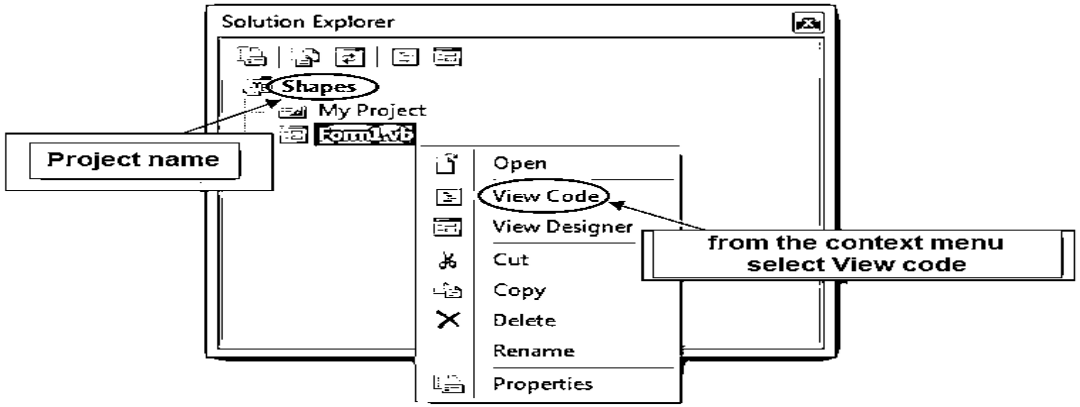
5- ListBox tool. **6- ComboBox tool.**

7- Button tool. **8- Form Window.**

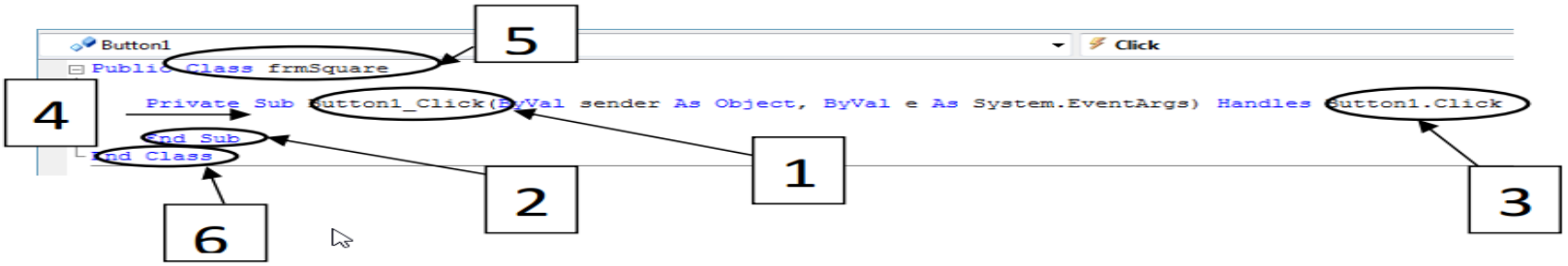
9- CheckBox tool.



(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.



(Event handler)



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.