

**Example5:** Write a VB program to find the area of triangle and rectangle according to the value of N as follows

$$A = \frac{1}{2} BH \dots \text{where } N=1$$

$$A = BH \dots \text{where } N=2$$

B is a textbox named Btxt... H is a textbox named Htxt... N is a textbox named Ntxt... A is a textbox named Area

**Solution:**

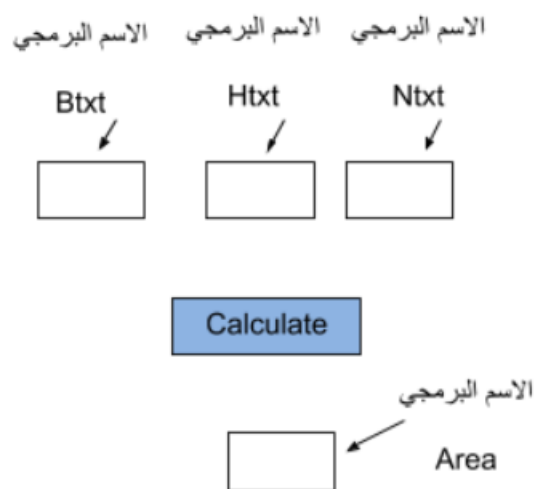
**IF** Ntxt.text=1 **then**

**Area.text=0.5\*(Btxt.text\*Htxt.text)**

**Else**

**Area.text=Btxt.text\*Htxt.text**

**Endif**



**Example 6:** Write a VB program to find the surface area and volume of cylinder in two isolated command buttons (command1 and command2)

$A=3.14(2R)H$  ( in command1)

$V=3.14R^2 H$  ( in command2)

R is a textbox named txtR.... H is a textbox named txtH.... A or V is a textbox named text3

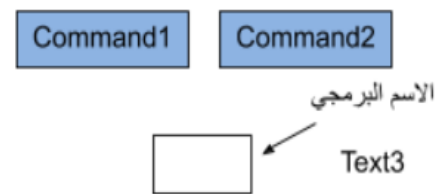
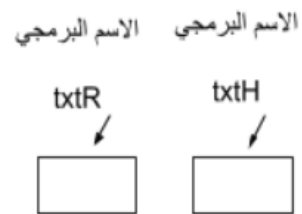
**Solution:**

**Code of Command1:**

`text3.text=3.14*2*val(txtR.text)*val(txtH.text)`

**code of Command2:**

`text3.text=3.14*(val(txtR.text))^2*val(txtH.text)`



**Example 7:** write a VB program to input three degrees for three students then print on the form (named F1) the degree of each student with its status (fail or pass) in a table, where the degrees are textboxes named D1,D2 and D3 respectively. (write code only).

**F1**

The Degree	Status	الاسم البرمجي D1
40	fail	<input type="text"/>
55	pass	<input type="text"/>
76	pass	<input type="text"/>

الاسم البرمجي  
D2

الاسم البرمجي  
D3

**Solution:**

The code can be written as follows:

```
F1.print "The Degree"; "    "; "The Status"
If D1.text >= 50 then
F1.print D1.text; "    "; "pass"
Else
F1.print D1.text; "    "; "fail"
End if
If D2.text >= 50 then
F1.print D2.text; "    "; "pass"
Else
F1.print D2.text; "    "; "fail"
End if
If D3.text >= 50 then
F1.print D3.text; "    "; "pass"
Else
F1.print D3.text; "    "; "fail"
End if
```

**Example 8:** write a visual basic program to find the value of S. Where N is a textbox named Ntxt and A is a textbox array named A and S is a textbox named Stxt (write code only).

$$S = \frac{B}{2} + \frac{2B}{3} + \frac{3B}{4} + \frac{4B}{5} + \dots + \frac{NB}{(N+1)}$$

$$B = \sum_{I=1}^5 4A(I)$$

Solution:

Dim I as integer, j as integer, B as single, S as single

For i=0 to 4

B=B+4\*A(I)

Next I

For j=1 to Ntxt.text

S=S+(j\*B)/(j+1)

Next j

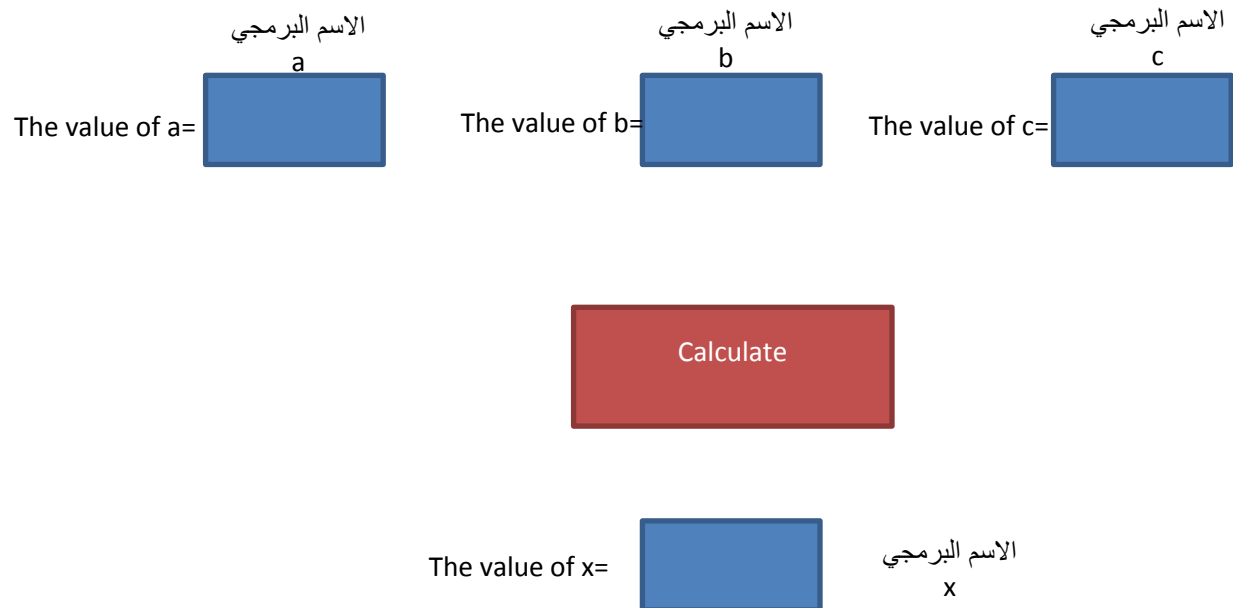
Stxt.text=S

Solution of H.W 2

H.W2: Write a (VB) program (profile and code) to find the value of X mentioned in the following equation:

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

Solution: The profile is shown below



The code can be written as follows:

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

If a=0 or ((val(b.text))^2 - 4 \* val(a.text) \* val(c.text)) < 0 then  
x.text="error"

Else

x.Text = (-Val (b.Text) + ((Val(b.Text)) ^ 2 - 4 \* Val(a.Text) \* Val(c.Text)) ^ 0.5)  
/ (2 \* Val(a.Text))

End if

H.W3: Write a (VB) program (profile and code) to find the value of the series **X**:

$$X = \frac{Z}{3} + \frac{3Z}{5} + \frac{5Z}{7} + \frac{7Z}{9} + \dots + \frac{(2N-1)Z}{(2N+1)}$$

Where **N** is a textbox named **N**, **a** and **b** is a textboxes named **a** and **b** respectively, **X** is a textbox named **X** (write code only).

$$Z = \sqrt{a^2 + b^2}$$