

Year 12 : Visual Basic Tutorial.

STUDY THIS

String Handling.

Strings can be added together. This is called string **concatenation**.

Example :

```
Dim Surname, Forename As String

Surname = "Thomas"
Forename = "Danny"
MsgBox("Hello " & Forename & " " & Surname)
```

This message box would output "Hello Danny Thomas"

Strings can be **compared** alphabetically so ...

"A" < "B" is **TRUE**
 "Martin" < "Paul" is **TRUE**
 "Apple" > "Ball" is **FALSE**

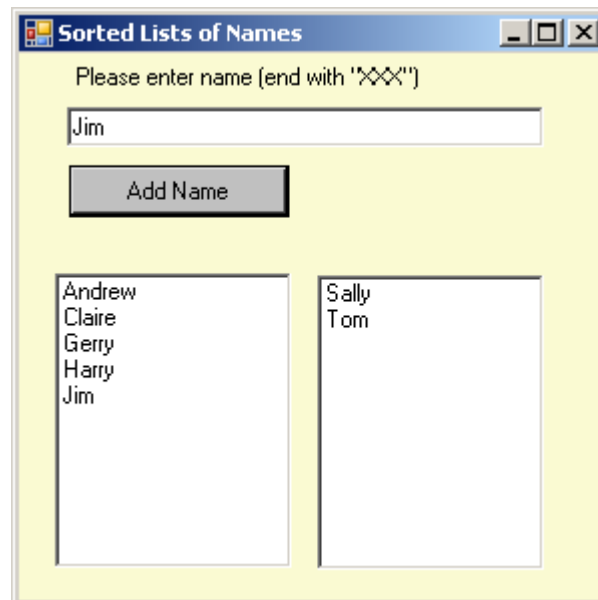
The table below shows a list of string methods with explanations and examples:

Method	Explanation	Example
Length	The number of characters in a string.	If Name = "John" then Length(Name) is 4
ToUpper	Changes letters to upper case	If Name = "John" then Name.ToUpper is "JOHN"
ToLower	Changes letters to lower case	If Name = "John" then Name.ToLower is "john"
Substring	Returns a string from inside another. The starting point and number of characters is given.	If Name = "Thomas Jones" then Name.Substring(3,2) is "ma"
Trim	Removes spaces from start and end of a string.	If Name = " Tom Jones " then Name.Trim is "Tom Jones"
IndexOf	Returns the starting position of one string inside another.	If Name = "Tom@Jones" then Name.IndexOf("@") is 3
Insert	Adds a string into the middle of another. The start point and the string must be given.	If Name = "Tom Jones" then Name.Insert(4,"Bart") is "Tom Bart Jones"
Remove	Deletes characters from a string. The start point and the number of characters to be deleted is given.	If Name = "Tom Bart Jones" then Name.Remove(4,5) is "Tom Jones"

**HANDS
ON****Visual Basic Challenges 6**

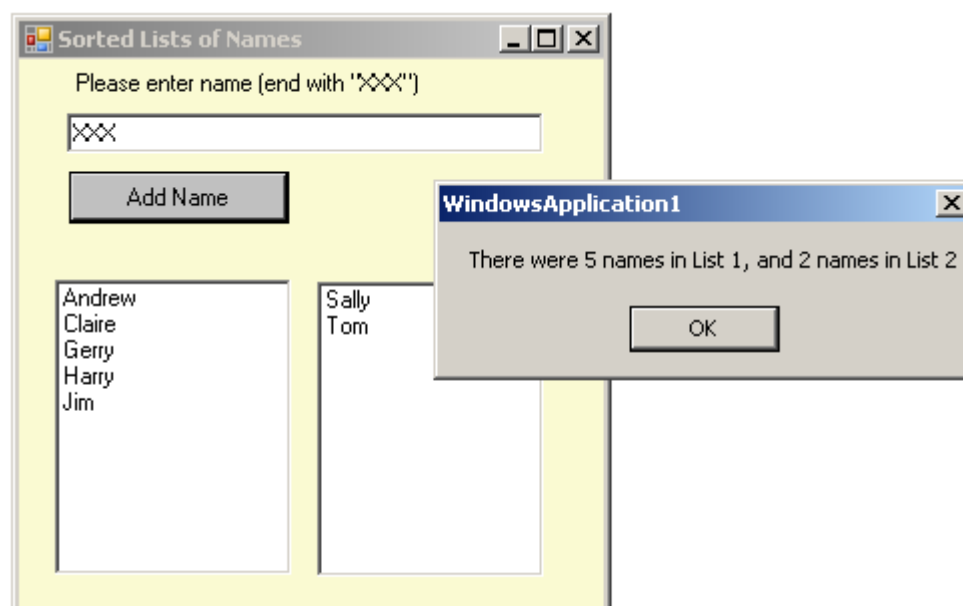
- [1] Create an application that allows the user to enter a sequence of names ending with a rogue value of "XXX".

The program should sort the names into two lists. One with all the names that start with letters "A" to "L", and the other list with the remaining names.



Can you keep the lists sorted in alphabetical order even though the names are not entered that way?

Make sure your program exits properly when "XXX" is entered, and outputs a message saying how many names are in each list.



- [2] The email address of employees in a company called BizzyBee Ltd is made from the first two letters of their first name, their surname and the department they work in.

For example, Mary Smith in the Accounts department has an email address:

ma.smith@accounts.bizzybee.com

James Davies in the Sales department has an email address:

ja.davies@sales.bizzybee.com

Write a program that allows an employee to enter their full name and the department they work for (Sales, Accounts, or Maintenance) and outputs their email address.

- [3] An online music and computer games company, codes each item it sells with a unique 6-character code. The first two characters must be either **CD** (for CDs) or **DV** (for DVDs). The remaining 4 characters must be numerical digits.

Valid codes : CD56321 DV6700 CD0018

Invalid codes : CD431 DW7891 DV567G

Write a program that inputs a code and fully validates it. If an incorrect code is found then the user must enter another code. When a valid code is entered, the program ends.

