



Example : For ... To... Step

Control
variable

Start
value

Stop
value

Amount
to add to
index

```
For index = 0 To n Step s  
    lstValues.Items.Add(index)  
Next
```



Example with Positive Step

```
Dim j As Integer
For j = 1 To 10 Step 2
    lstBox.Items.Add(j)
Next
lstBox.Items.Add( "Blastoff" )
```



Example with Negative Step

```
Dim j As Integer
For j = 10 To 1 Step -1
    lstBox.Items.Add(j)
Next
lstBox.Items.Add( "Blastoff" )
```



Non-integer Step Values

- Can lead to round-off errors with the result that the loop is not executed the intended number of times.



Non-integer Step Example

- A loop beginning with

```
For i As Double = 1 To 2 Step 0.1
```

will be executed only 10 times instead of the intended 11 times. It should be replaced with

```
For i As Double = _  
    1 To 2.01 Step 0.1
```



Example

- A loop beginning with

For i As Double = 1 To 2 Step 0.1

will be executed only 10 times instead of the intended 11 times. It should be replaced with

For i As Double = _

1 To 2.01 Step 0.1



Lab 6.7 For Loop with Different Step

- Try Lab 6.7 to discover the characteristics of For ... Next Loop