

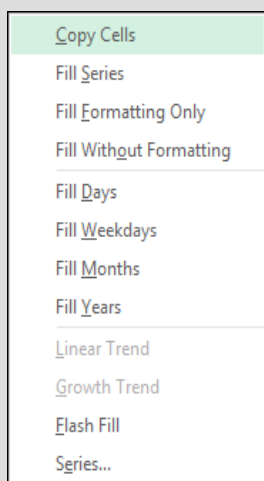
## note

### You can also flash fill more quickly by using the AutoFill handle

The *AutoFill handle* is the small black dot on the bottom-right corner of the active cell (or range of cells).



In: *Lesson 2-16: Use AutoFill options*, you learned that if you right-click and drag the AutoFill handle you are presented with *AutoFill options*:



You can use the *Flash Fill* item on the *AutoFill options* list to request a Flash Fill.

This will do exactly the same as clicking:

Home→Editing→Fill→Flash Fill

You'll find that this method is faster than using the Ribbon.

This method is also the preferred way to provide Flash Fill with more than one example result for more complex problems (you'll do this in: *Lesson 2-20: Use multiple example Flash Fill to concatenate text*).

## Lesson 2-19: Use manual Flash Fill to split text

Here are two examples of international telephone numbers.

+44 (0)113-4960227 (a UK telephone number)

+356 (0)2138-3393 (a Maltese telephone number)

The *country code* (or international dialling code) is shown as a + symbol followed by one or more numbers. The *NDD* (National Direct Dialling prefix) is shown in brackets. This is the access code used to make a call within the relevant country but is omitted when calling from outside the country. The *Area Code* consists of the numbers after the closing bracket but before the hyphen.

In this lesson we'll use manual Flash Fill to split telephone numbers into the *Country Code*, *Area Code* and *Phone Number* like this:

	A	B	C	D	E
3	<b>Company</b>	<b>Telephone</b>	<b>Country Code</b>	<b>Area Code</b>	<b>Phone Number</b>
4	Books A Million	+44 (0)113-4960227	+44	113	4960227
5	Maltese Books	+356 (0)2138-3393	+356	2138	3393
6	Bargain Bookstore	+44 (0)115-4960498	+44	115	4960498

In Excel versions prior to Excel 2013 you'd have had to use some very complex formulas in order to split this type of text. With the new *Flash Fill* feature you can achieve the same result in seconds.

- 1 Open *Phone Book-1* from your sample files folder.
- 2 Extract the *Country Code* from the telephone number in column B and place it into column C.

If you were to type +44 into cell C4, Excel would interpret it as a positive number and display the result as 44 (without the plus sign).

In order to signal to Excel that you want the plus sign to be displayed, you will need to indicate that +44 should be regarded as text rather than as a number.

You discovered the technique for doing this in: *Lesson 2-1: Enter text and numbers into a worksheet*.

If an apostrophe is placed before a number, Excel will regard it as text.

1. Type: '+44 into cell C4 (an apostrophe followed by +44).
2. Press: <Enter>
3. Making sure that the active cell is in one of the cells that will be Flash Filled (ie anywhere in the range C3:C18), click:

Home→Editing→Fill→Flash Fill

(Alternatively, you could also use the shortcut keys: <Ctrl>+<E> to flash fill).

The country code is extracted into the remaining cells in column C.

### Phone Book-1

## note

### The difference between Flash Fill and a formula-based solution

There are two ways to solve the problem posed in this lesson:

#### 1. Use Flash Fill

This is the method used in this lesson. Flash Fill provides a fast and simple solution.

#### 2. Use complex formulas

Only expert Excel users could construct the complex formulas required to split the telephone numbers contained in the sample file without the use of Flash Fill.

In the *Expert Skills* book in this series we solve exactly the same problem presented in this lesson without Flash Fill.

Complex formulas are used instead, to provide a formula-based solution.

### Advantage of a formula-based solution

The results of a Flash Fill do not automatically update when the source data changes.

This means that if you change the telephone number in column B you will then need to Flash Fill three times to update columns C, D and E.

Formula results automatically update whenever the source cells change.

This means that if you change the telephone number in the formula-based solution, the *Country Code*, *Area Code* and *Phone Number* will automatically update.

	A	B	C
3	<b>Company</b>	<b>Telephone</b>	<b>Country Code</b>
4	Books A Million	+44 (0)113-4960227	+44
5	Maltese Books	+356 (0)2138-3393	+356
6	Bargain Bookstore	+44 (0)115-4960498	+44

Notice that Excel has placed a green triangle in the top-left corner of each cell. Excel thinks you may have made an error but, of course, the value is fine. If you want to remove the green triangles, use the method you learned in: *Lesson 2-4: Select a range of cells and understand Smart Tags.*

### 3 Extract the *Area Code* from the telephone number in column B and place it into column D.

Use exactly the same method as you did for the country code. The first area code you need to type is: '113

Even though there is no plus sign, it is still useful to include the apostrophe as it will prevent Excel from re-formatting numbers (see next step for more on this).

### 4 Extract the *Phone Number* from the telephone number in column B and place it into column E.

Use exactly the same method as you did for the country code. The first telephone number is: '4960227

In this case you must use a leading apostrophe to prevent Excel from re-formatting large numbers. For example, the telephone number: 20180948 would be displayed as 2E+07 if you didn't include the apostrophe.

The *Country Code*, *Area Code* and *Phone Number* are now extracted for every international telephone number:

	A	B	C	D	E
3	<b>Company</b>	<b>Telephone</b>	<b>Country Code</b>	<b>Area Code</b>	<b>Phone Number</b>
4	Books A Million	+44 (0)113-4960227	+44	113	4960227
5	Maltese Books	+356 (0)2138-3393	+356	2138	3393
6	Bargain Bookstore	+44 (0)115-4960498	+44	115	4960498

### 5 Save your work as *Phone Book-2*.