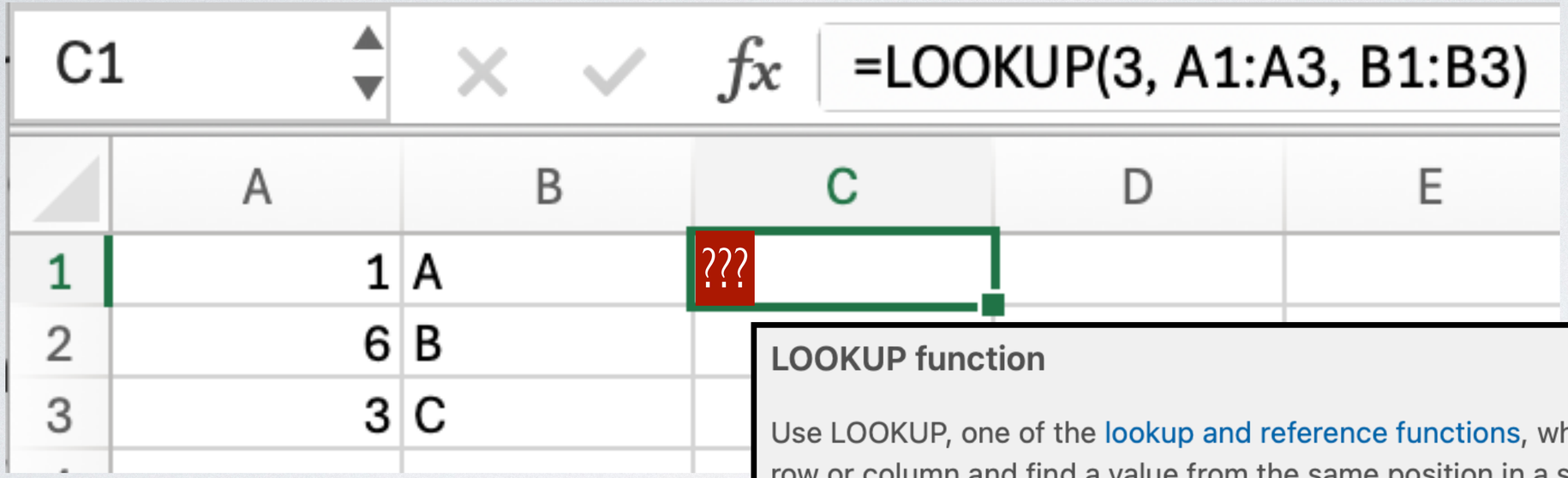
Spreadsheets

Demo of Spreadsheet Oddities



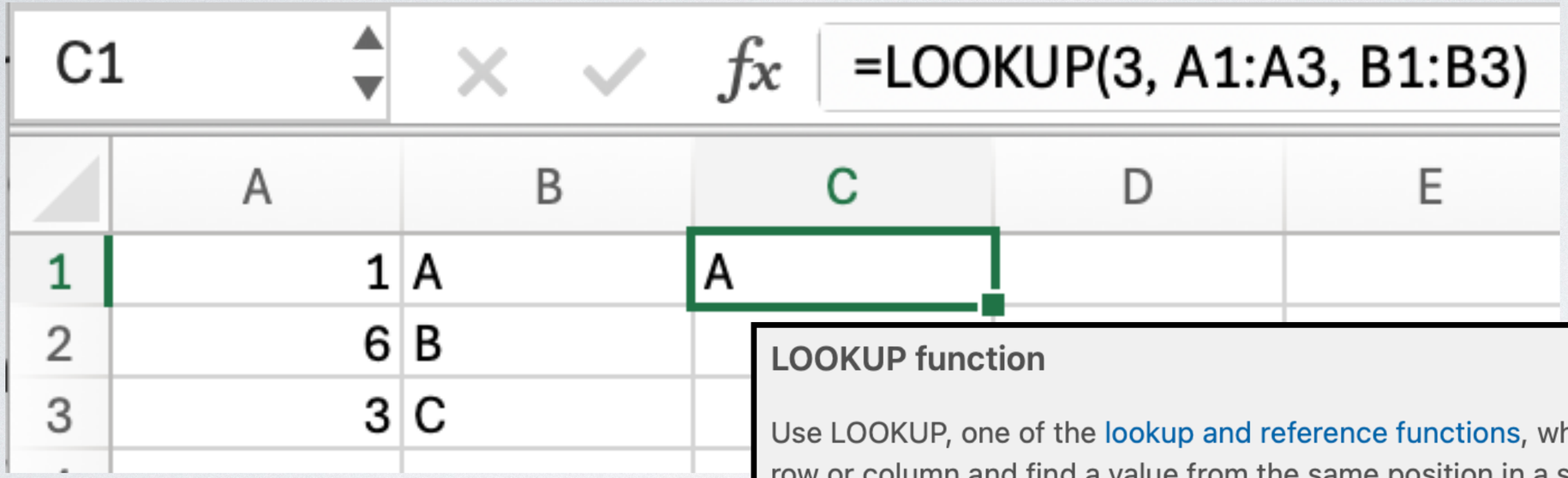
LOOKUP function

Use LOOKUP, one of the lookup and reference functions, when you need to look in a single row or column and find a value from the same position in a second row or column.

For example, let's say you know the part number for an auto part, but you don't know the price. You can use the LOOKUP function to return the price in cell H2 when you enter the auto part number in cell H1.

B	C	D	E	F	G	H
Part Number	**Part Name**	**Part Price**	**Status**		**Part Number**	
A001	water pump	$68.39	In stock		**Part Price**	<enter the LOOKUP forumula here>
A002	alternator	$380.73	In stock			
A003	air filter	$15.49	In stock			
A004	wheel bearing	$35.16	In stock			

Demo of Spreadsheet Oddities



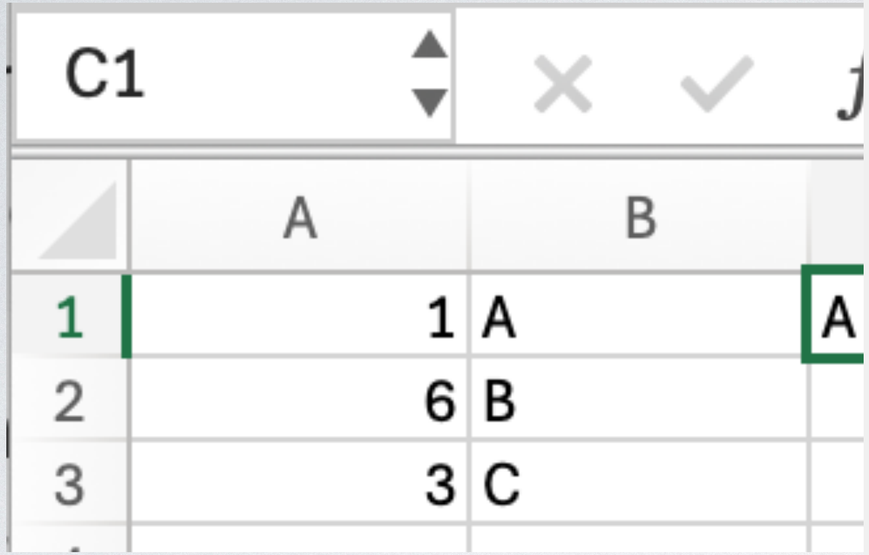
LOOKUP function

Use LOOKUP, one of the lookup and reference functions, when you need to look in a single row or column and find a value from the same position in a second row or column.

For example, let's say you know the part number for an auto part, but you don't know the price. You can use the LOOKUP function to return the price in cell H2 when you enter the auto part number in cell H1.

B	C	D	E	F	G	H
Part Number	**Part Name**	**Part Price**	**Status**		**Part Number**	
A001	water pump	$68.39	In stock		**Part Price**	<enter the LOOKUP forumula here>
A002	alternator	$380.73	In stock			
A003	air filter	$15.49	In stock			
A004	wheel bearing	$35.16	In stock			

Demo of Spreadsheet Oddities



Vector form

The vector form of **LOOKUP** looks in a one-row or one-column range (known as a vector) for a value and returns a value from the same position in a second one-row or one-column range.

Syntax

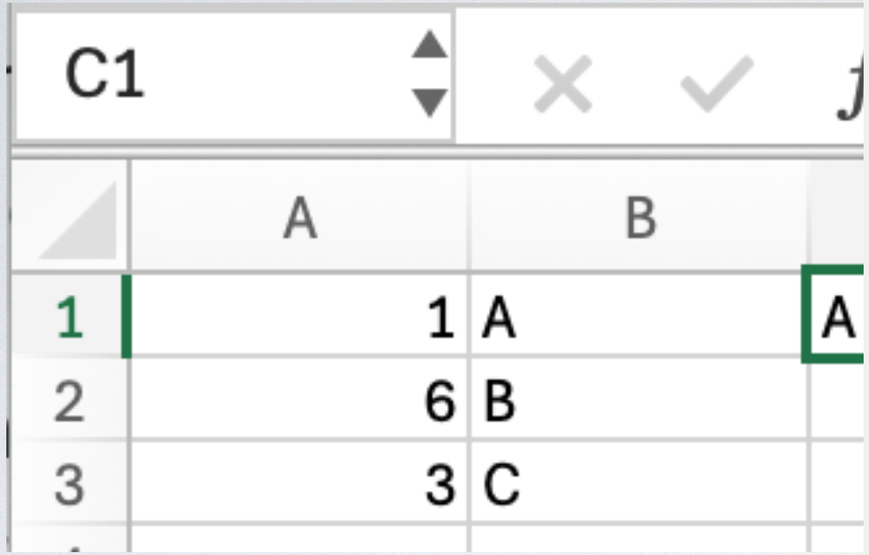
LOOKUP(lookup_value, lookup_vector, [result_vector])

The **LOOKUP** function vector form syntax has the following arguments:

- **lookup_value** Required. A value that **LOOKUP** searches for in the first vector. ***Lookup_value*** can be a number, text, a logical value, or a name or reference that refers to a value.
- **lookup_vector** Required. A range that contains only one row or one column. The values in ***lookup_vector*** can be text, numbers, or logical values.

> **Important:** The values in ***lookup_vector*** must be placed in ascending order: ..., -2, -1, 0, 1, 2, ..., A-Z, FALSE, TRUE; otherwise, **LOOKUP** might not return the correct value. Uppercase and lowercase text are equivalent.

Demo of Spreadsheet Oddities



Vector form

The vector form of **LOOKUP** looks in a one-row or one-column range (known as a vector) for a value and returns a value from the same position in a second one-row or one-column range.

Syntax

LOOKUP(lookup_value, lookup_vector, [result_vector])

The **LOOKUP** function vector form syntax has the following arguments:

- **lookup_value** Required. A value that **LOOKUP** searches for in the first vector. ***Lookup_value*** can be a number, text, a logical value, or a name or reference that refers to a value.
- **lookup_vector** Required. A range that contains only one row or one column. The values in ***lookup_vector*** can be text, numbers, or logical values.

Important: The values in ***lookup_vector*** must be placed in ascending order: ..., -2, -1, 0, 1, 2, ..., A-Z, FALSE, TRUE; otherwise, **LOOKUP** might not return the correct value. Uppercase and lowercase text are equivalent.

Live Demo

- Dates
- References
-

Spreadsheet Success Factors

- Liveness (output is updated immediately)
- Directness (small distance between goal and actions required)
  - Is combining data, metadata, and calculations required for this?
- One-click deployment (universal reproducibility)

Promising Approaches

- Testing
- Reverse engineering
- Smell detection
- Clone detection
- Refactoring

Leverage Success Factors for Better Systems?

- Break into groups (one per success factor)
  - Liveness (output is updated immediately)
  - Directness (small distance between goal and actions required)
  - One-click deployment (universal reproducibility)
- Propose new ideas that take each success factor further.