

Task: Convert multiple rows into comma separated values in MS Excel.

Approach Used:

We can achieve this using simple Excel formulas.

Example:

Let's say we have following table that has records for couple of movies. The actors are stored in multiple rows and we want to convert this into comma separated values. Such that, there will be only one row for a Movie/Year Released/Director

Movie	Year Released	Director	Actors
Logan	2017	James Mangold	Hugh Jackman
Logan	2017	James Mangold	Patrick Stewart
Logan	2017	James Mangold	Dafne Keen
Logan	2017	James Mangold	Boyd Holbrook
Logan	2017	James Mangold	Stephen Merchant
Logan	2017	James Mangold	Elizabeth Rodriguez
Logan	2017	James Mangold	Richard E. Grant
The Dark Knight	2008	Christopher Nolan	Christian Bale
The Dark Knight	2008	Christopher Nolan	Heath Ledger
The Dark Knight	2008	Christopher Nolan	Aaron Eckhart
The Dark Knight	2008	Christopher Nolan	Michael Caine
The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal
The Dark Knight	2008	Christopher Nolan	Gary Oldman
The Dark Knight	2008	Christopher Nolan	Morgan Freeman

Steps:

1. Sort the Movie by ascending order.

Remove duplicates rows.

Add a new column "ConcatActors" to store the concatenated values.

	A	B	C	D	E
1	Movie	Year Release	Director	Actors	ConcatActors
2	Logan	2017	James Mangold	Hugh Jackman	
3	Logan	2017	James Mangold	Patrick Stewart	
4	Logan	2017	James Mangold	Dafne Keen	
5	Logan	2017	James Mangold	Boyd Holbrook	
6	Logan	2017	James Mangold	Stephen Merchant	
7	Logan	2017	James Mangold	Elizabeth Rodriguez	
8	Logan	2017	James Mangold	Richard E. Grant	
9	The Dark Knight	2008	Christopher Nolan	Christian Bale	
10	The Dark Knight	2008	Christopher Nolan	Heath Ledger	
11	The Dark Knight	2008	Christopher Nolan	Aaron Eckhart	
12	The Dark Knight	2008	Christopher Nolan	Michael Caine	
13	The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal	
14	The Dark Knight	2008	Christopher Nolan	Gary Oldman	
15	The Dark Knight	2008	Christopher Nolan	Morgan Freeman	

2. Add the following formula to 2nd row in Column E (i.e. E2).

`=IF(A2=A1,E1&" "&D2,D2)`

This formula does the following,

- 2.1 Compare if movie value in A2 (i.e. Current Row) is = movie value in A1 (i.e. Previous row).
- 2.2 If 2.1 is TRUE, Then append the Actors value in D2 (i.e. Current Row) with concatenated actors in previous row.
- 2.3 If 2.1 is FALSE, Then populate the Actors value in D2 (i.e. Current Row). Means, this is the starting row.

Drag/Fill (or) copy/paste the formula to rest of the rows.

Get & Transform Data		Queries & Connections		Sort & Filter	Data Tools
E2					
Sensitivity: General					
A	B	C	D	E	
Movie	Year Release	Director	Actors	ConcatActors	
Logan	2017	James Mangold	Hugh Jackman	Hugh Jackman	
Logan	2017	James Mangold	Patrick Stewart	Hugh Jackman, Patrick Stewart	
Logan	2017	James Mangold	Dafne Keen	Hugh Jackman, Patrick Stewart, Dafne Keen	
Logan	2017	James Mangold	Boyd Holbrook	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook	
Logan	2017	James Mangold	Stephen Merchant	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant	
Logan	2017	James Mangold	Elizabeth Rodriguez	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant, Elizabeth Rodriguez	
Logan	2017	James Mangold	Richard E. Grant	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant, Elizabeth Rodriguez, Richard E. Grant	
The Dark Knight	2008	Christopher Nolan	Christian Bale	Christian Bale	
The Dark Knight	2008	Christopher Nolan	Heath Ledger	Christian Bale, Heath Ledger	
The Dark Knight	2008	Christopher Nolan	Aaron Eckhart	Christian Bale, Heath Ledger, Aaron Eckhart	
The Dark Knight	2008	Christopher Nolan	Michael Caine	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine	
The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal	
The Dark Knight	2008	Christopher Nolan	Gary Oldman	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal, Gary Oldman	
The Dark Knight	2008	Christopher Nolan	Morgan Freeman	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal, Gary Oldman, Morgan Freeman	

3. Copy the 'ConcatActors' Column

Get & Transform Data		Queries & Connections		Sort & Filter	Data Tools
E1					
Sensitivity: General					
A	B	C	D	E	
Movie	Year Release	Director	Actors	ConcatActors	
Logan	2017	James Mangold	Hugh Jackman	Hugh Jackman	
Logan	2017	James Mangold	Patrick Stewart	Hugh Jackman, Patrick Stewart	
Logan	2017	James Mangold	Dafne Keen	Hugh Jackman, Patrick Stewart, Dafne Keen	
Logan	2017	James Mangold	Boyd Holbrook	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook	
Logan	2017	James Mangold	Stephen Merchant	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant	
Logan	2017	James Mangold	Elizabeth Rodriguez	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant, Elizabeth Rodriguez	
Logan	2017	James Mangold	Richard E. Grant	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant, Elizabeth Rodriguez, Richard E. Grant	
The Dark Knight	2008	Christopher Nolan	Christian Bale	Christian Bale	
The Dark Knight	2008	Christopher Nolan	Heath Ledger	Christian Bale, Heath Ledger	
The Dark Knight	2008	Christopher Nolan	Aaron Eckhart	Christian Bale, Heath Ledger, Aaron Eckhart	
The Dark Knight	2008	Christopher Nolan	Michael Caine	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine	
The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal	
The Dark Knight	2008	Christopher Nolan	Gary Oldman	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal, Gary Oldman	
The Dark Knight	2008	Christopher Nolan	Morgan Freeman	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal, Gary Oldman, Morgan Freeman	

- Paste the copied content as “Values” in the same column. This is to remove the formula & retain only the values.

The screenshot shows an Excel spreadsheet with columns A (Movie), B (Year Release), C (Director), D (Actors), and E (ConcatActors). The 'ConcatActors' column contains comma-separated lists of actors. A right-click context menu is open over the 'ConcatActors' column, showing 'Paste Options' with 'Values (V)' selected. The menu also includes options like Cut, Copy, Paste, Insert, Delete, Clear Contents, Format Cells..., Column Width..., Hide, and Unhide.

Movie	Year Release	Director	Actors	ConcatActors
Logan	2017	James Mangold	Hugh Jackman	Hugh Jackman
Logan	2017	James Mangold	Patrick Stewart	Hugh Jackman,Patrick Stewart
Logan	2017	James Mangold	Dafne Keen	Hugh Jackman,Patrick Stewart,Dafne Keen
Logan	2017	James Mangold	Boyd Holbrook	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook
Logan	2017	James Mangold	Stephen Merchant	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant
Logan	2017	James Mangold	Elizabeth Rodriguez	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant,Elizabeth Rodriguez
Logan	2017	James Mangold	Richard E. Grant	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant,Elizabeth Rodriguez,Richard E. Grant
The Dark Knight	2008	Christopher Nolan	Christian Bale	Christian Bale
The Dark Knight	2008	Christopher Nolan	Heath Ledger	Christian Bale,Heath Ledger
The Dark Knight	2008	Christopher Nolan	Aaron Eckhart	Christian Bale,Heath Ledger,Aaron Eckhart
The Dark Knight	2008	Christopher Nolan	Michael Caine	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine
The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal
The Dark Knight	2008	Christopher Nolan	Gary Oldman	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal,Gary Oldman
The Dark Knight	2008	Christopher Nolan	Morgan Freeman	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal,Gary Oldman,Morgan Freeman

- Create a new column called “DeleteRow”. Add the below formula in first row of that column (i.e. in case of below example, it will be F2)

=IF(A2=A3,1,0)

This formula simply identifies the last row for a movie. We want to retain only the last row (which has the complete actor list comma separated for a movie).

The screenshot shows the Excel spreadsheet with a new column F (DeleteRow?) added. The formula bar shows the formula '=IF(A2=A3,1,0)' entered in cell F2. The formula is highlighted with a red box. The spreadsheet shows the same data as before, but with the new column F.

Movie	Year Release	Director	Actors	ConcatActors	DeleteRow?
Logan	2017	James Mangold	Hugh Jackman	Hugh Jackman	1
Logan	2017	James Mangold	Patrick Stewart	Hugh Jackman,Patrick Stewart	1
Logan	2017	James Mangold	Dafne Keen	Hugh Jackman,Patrick Stewart,Dafne Keen	1
Logan	2017	James Mangold	Boyd Holbrook	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook	1
Logan	2017	James Mangold	Stephen Merchant	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant	1
Logan	2017	James Mangold	Elizabeth Rodriguez	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant,Elizabeth Rodriguez	1
Logan	2017	James Mangold	Richard E. Grant	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant,Elizabeth Rodriguez,Richard E. Grant	0
The Dark Knight	2008	Christopher Nolan	Christian Bale	Christian Bale	1
The Dark Knight	2008	Christopher Nolan	Heath Ledger	Christian Bale,Heath Ledger	1
The Dark Knight	2008	Christopher Nolan	Aaron Eckhart	Christian Bale,Heath Ledger,Aaron Eckhart	1
The Dark Knight	2008	Christopher Nolan	Michael Caine	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine	1
The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal	1
The Dark Knight	2008	Christopher Nolan	Gary Oldman	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal,Gary Oldman	1
The Dark Knight	2008	Christopher Nolan	Morgan Freeman	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal,Gary Oldman,Morgan Freeman	0

- Repeat step 3 & 4 for the values in DeleteRow column (i.e. copy and paste it as values in the same column)

- Apply filter on DeleteRow column to select only those rows with 1 (i.e. TRUE) as value.

The screenshot shows the Excel spreadsheet with the 'DeleteRow?' column filtered to show only rows with a value of 1. The rows for 'Logan' and the first six rows of 'The Dark Knight' are visible, while the last row of 'The Dark Knight' (Morgan Freeman) is hidden.

Movie	Year Release	Director	Actors	ConcatActors	DeleteRow?
Logan	2017	James Mangold	Hugh Jackman	Hugh Jackman	1
Logan	2017	James Mangold	Patrick Stewart	Hugh Jackman,Patrick Stewart	1
Logan	2017	James Mangold	Dafne Keen	Hugh Jackman,Patrick Stewart,Dafne Keen	1
Logan	2017	James Mangold	Boyd Holbrook	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook	1
Logan	2017	James Mangold	Stephen Merchant	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant	1
Logan	2017	James Mangold	Elizabeth Rodriguez	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant,Elizabeth Rodriguez	1
The Dark Knight	2008	Christopher Nolan	Christian Bale	Christian Bale	1
The Dark Knight	2008	Christopher Nolan	Heath Ledger	Christian Bale,Heath Ledger	1
The Dark Knight	2008	Christopher Nolan	Aaron Eckhart	Christian Bale,Heath Ledger,Aaron Eckhart	1
The Dark Knight	2008	Christopher Nolan	Michael Caine	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine	1
The Dark Knight	2008	Christopher Nolan	Maggie Gyllenhaal	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal	1
The Dark Knight	2008	Christopher Nolan	Gary Oldman	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal,Gary Oldman	1

8. Select and delete the rows with DeleteRow = 1

Sensitivity: General								
	A	B	C	D	E	F	G	H
1	Movie	Year Release	Director	Actors	ConcatActors	DeleteRow?		
2	Logan	2017	James Mangold	Hugh Jackman	Hugh Jackman	1		
3	Logan	2017	James Mangold	Patrick Stewart	Hugh Jackman,Patrick Stewart	1		
4	Logan	2017	James Mangold	Dafne Keen	Hugh Jackman,Patrick Stewart,Dafne Keen	1		
5	Logan	2017	James Mangold	Boyd Holbrook	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook	1		
6	Logan	2017	James Mangold	Stephen Merchant	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant	1		
7	Calibri	11	A* A* \$ %	Mangold	Elizabeth Rodriguez	Hugh Jackman,Patrick Stewart,Dafne Keen,Boyd Holbrook,Stephen Merchant,Elizabeth Rodriguez	1	
8	B I			pher Nolan	Christian Bale	Christian Bale	1	
9				Heath Ledger	Christian Bale,Heath Ledger	1		
10				2008 Christopher Nolan	Aaron Eckhart	Christian Bale,Heath Ledger,Aaron Eckhart	1	
11				2008 Christopher Nolan	Michael Caine	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine	1	
12				2008 Christopher Nolan	Maggie Gyllenhaal	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal	1	
13				2008 Christopher Nolan	Gary Oldman	Christian Bale,Heath Ledger,Aaron Eckhart,Michael Caine,Maggie Gyllenhaal,Gary Oldman	1	
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

9. Clear all filters. Now we are left with only the full list of comma separated actors for a movie.

	A	B	C	D	E	F
1	Movie	Year Release	Director	Actors	ConcatActors	DeleteRow?
2	Logan	2017	James Mangold	Richard E. Grant	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant, Elizabeth Rodriguez, Richard E. Grant	0
3	The Dark Knight	2008	Christopher Nolan	Morgan Freeman	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal, Gary Oldman, Morgan Freeman	0
4						

10. We can delete the Column D & F from the example in step 9 as they are not needed anymore.

Sensitivity: General				
	A	B	C	D
1	Movie	Year Release	Director	ConcatActors
2	Logan	2017	James Mangold	Hugh Jackman, Patrick Stewart, Dafne Keen, Boyd Holbrook, Stephen Merchant, Elizabeth Rodriguez, Richard E. Grant
3	The Dark Knight	2008	Christopher Nolan	Christian Bale, Heath Ledger, Aaron Eckhart, Michael Caine, Maggie Gyllenhaal, Gary Oldman, Morgan Freeman