

MERGE TABLES USING VLOOKUP() IN EXCEL

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- The given tables, Table1 and Tables2 are to be merged

A	B	C
Table1		
Content ID	Reaction Type	Date
101	disgust	07-11-2020
102	adore	17-06-2021
103	cherish	18-04-2021
104	disgust	06-01-2021
105	interested	23-08-2020
106	hate	07-12-2020
107	cherish	11-04-2021
108	hate	27-01-2021
109	love	01-04-2021
110	indifferent	07-11-2020

A	B	C
Table 2		
Reaction Type	Sentiment	Score
heart	positive	60
want	positive	70
disgust	negative	0
hate	negative	5
interested	positive	30
indifferent	neutral	20
love	positive	65
super love	positive	75
cherish	positive	70
adore	positive	72

- The common column in both tables is “Reaction Type” (Column B in Table1, Column A in Table2)
- Example1- If reaction type of a content is “disgust”, then Sentiment type is “negative” and score is 0
- Example2- If reaction type of a content is “cherish”, then Sentiment type is “positive” and score is 70

- Let's see how Table2 is merged with Table1 using VLOOKUP() function in excel, considering Reaction Type as the common column
- The resulting table will have total 5 columns - 3 columns (A to C) from Table1 and 2 columns (B to C) from Table2

A	B	C
Table1		
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101	disgust	07-11-2020
102	adore	17-06-2021
103	cherish	18-04-2021
104	disgust	06-01-2021
105	interested	23-08-2020
106	hate	07-12-2020
107	cherish	11-04-2021
108	hate	27-01-2021
109	love	01-04-2021
110	indifferent	07-11-2020

A	B	C
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interested	positive	30
indifferent	neutral	20
love	positive	65
super love	positive	75
cherish	positive	70
adore	positive	72

- The expected merged table is shown at the bottom
- The columns B and C in Table 2 are merged with Table1
- The column A in Table 2 is not considered as it is a common column

A	B	C
Table1		
Content ID	Reaction Type	Date
101	disgust	07-11-2020
102	adore	17-06-2021
103	cherish	18-04-2021
104	disgust	06-01-2021
105	interested	23-08-2020
106	hate	07-12-2020
107	cherish	11-04-2021
108	hate	27-01-2021
109	love	01-04-2021
110	indifferent	07-11-2020

A	B	C
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want	positive	70
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interested	positive	30
indifferent	neutral	20
love	positive	65
super love	positive	75
cherish	positive	70
adore	positive	72

A	B	C	D	E
Merged Table				
Content ID	Reaction Type	Date	Sentiment	Score
101	disgust	07-11-2020	negative	0
102	adore	17-06-2021	positive	72
103	cherish	18-04-2021	positive	70
104	disgust	06-01-2021	negative	0
105	interested	23-08-2020	positive	30
106	hate	07-12-2020	negative	5
107	cherish	11-04-2021	positive	70
108	hate	27-01-2021	negative	5
109	love	01-04-2021	positive	65
110	indifferent	07-11-2020	neutral	20

- The formula to get values in D column is:
- **D3=VLOOKUP(B3, ' [Table 2.xlsx]Sheet1'!\$A:\$C, 2, FALSE)**
- 1st part – lookup value - **B3** in Table1 - Reaction Type is the common column
- 2nd part – range of values where look up is located – all values from A to C columns in sheet1 of Table2
- 3rd part - column number in the range that contains the return value – **2** – 2nd column in the range A to C in Table 2 – Sentiment column– if there is a match, return values in that column
- 4th part – can be TRUE/FALSE – here, it is **FALSE** – need an exact match of the return value

A	B	C
Table1		
Content ID	Reaction Type	Date
101	disgust	07-11-2020
102	adore	17-06-2021
103	cherish	18-04-2021
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105	interested	23-08-2020
106	hate	07-12-2020
107	cherish	11-04-2021
108	hate	27-01-2021
109	love	01-04-2021
110	indifferent	07-11-2020

A	B	C
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want	positive	70
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super love	positive	75
cherish	positive	70
adore	positive	72

A	B	C	D	E
Merged Table				
Content ID	Reaction Type	Date	Sentiment	Score
101	disgust	07-11-2020	negative	0
102	adore	17-06-2021	positive	72
103	cherish	18-04-2021	positive	70
104	disgust	06-01-2021	negative	0
105	interested	23-08-2020	positive	30
106	hate	07-12-2020	negative	5
107	cherish	11-04-2021	positive	70
108	hate	27-01-2021	negative	5
109	love	01-04-2021	positive	65
110	indifferent	07-11-2020	neutral	20

- `D3=VLOOKUP(B3, ' [Table 2.xlsx]Sheet1'!$A:$C, 2, FALSE)`
- Consider the example
- B3 in Table 1 - “disgust”
- Range of values in Table 2 is from columns A to C
- There is a match in A5 in Table 2
- The corresponding value at 2nd column in the range A to C in Table 2 - B5- “negative”
- The result can be seen at the cell D3 of merged Table (Table1)

	A	B	C
1	Table1		
2	Content ID	Reaction Type	Date
3	101	disgust	07-11-2020
4	102	adore	17-06-2021
5	103	cherish	18-04-2021
6	104	disgust	06-01-2021
7	105	interested	23-08-2020
8	106	hate	07-12-2020
9	107	cherish	11-04-2021
10	108	hate	27-01-2021
11	109	love	01-04-2021
12	110	indifferent	07-11-2020

	A	B	C
1	Table 2		
2	Reaction Type	Sentiment	Score
3	heart	positive	60
4	want	positive	70
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7	interested	positive	30
8	indifferent	neutral	20
9	love	positive	65
10	super love	positive	75
11	cherish	positive	70
12	adore	positive	72

	A	B	C	D	E
1	Merged Table				
2	Content ID	Reaction Type	Date	Sentiment	Score
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5	103	cherish	18-04-2021	positive	70
6	104	disgust	06-01-2021	negative	0
7	105	interested	23-08-2020	positive	30
8	106	hate	07-12-2020	negative	5
9	107	cherish	11-04-2021	positive	70
10	108	hate	27-01-2021	negative	5
11	109	love	01-04-2021	positive	65
12	110	indifferent	07-11-2020	neutral	20

- The formula to get values in E column is:
- `E3=VLOOKUP(B3, ' [Table 2.xlsx]Sheet1'!$A:$C, 3, FALSE)`
- 1st part – lookup value - **B3** in Table1 - Reaction Type
- 2nd part – range of values where look up is located – all values from A to C columns in sheet1 of Table2
- 3rd part - column number in the range that contains the return value – **3** – 3rd column in the range A to C in Table 2 – Score column– if there is a match, return values in that column
- 4th part – can be TRUE/FALSE – here, it is **FALSE** – need an exact match of the return value

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Table1		
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102	adore	17-06-2021
103	cherish	18-04-2021
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A	B	C	D	E
Merged Table				
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105	interested	23-08-2020	positive	30
106	hate	07-12-2020	negative	5
107	cherish	11-04-2021	positive	70
108	hate	27-01-2021	negative	5
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110	indifferent	07-11-2020	neutral	20

- `E3=VLOOKUP(B3, '[Table 2.xlsx]Sheet1'!$A:$C, 3, FALSE)`
- Consider the example
- B3 in Table 1 - “disgust”
- Range of values in Table 2 is from columns A to C
- There is a match in A5 in Table 2
- The corresponding value at 3rd column in the range A to C in Table 2 – C5- “0”
- The result can be seen at the cell E3 of merged Table (Table1)

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1	Table1		
2	Content ID	Reaction Type	Date
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4	102	adore	17-06-2021
5	103	cherish	18-04-2021
6	104	disgust	06-01-2021
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9	107	cherish	11-04-2021
10	108	hate	27-01-2021
11	109	love	01-04-2021
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7	105	interested	23-08-2020	positive	30
8	106	hate	07-12-2020	negative	5
9	107	cherish	11-04-2021	positive	70
10	108	hate	27-01-2021	negative	5
11	109	love	01-04-2021	positive	65
12	110	indifferent	07-11-2020	neutral	20

- The formula must be applied to the remaining cells to get the complete table

	A	B	C	D	E
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10	108	hate	27-01-2021	negative	5
11	109	love	01-04-2021	positive	65
12	110	indifferent	07-11-2020	neutral	20

Thank you!!