

Lab Assignment-3

Index and Match Function

[INDEX and MATCH functions Exercise Questions](#)

Worksheet: SalesData

ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales
101	PRODA	Electronics	120	130	140	150	160
102	PRODB	Furniture	150	160	170	180	190
103	PRODC	Electronics	200	210	220	230	240
104	PRODD	Clothing	90	100	110	120	130
105	PRODE	Furniture	220	230	240	250	260
106	PRODF	Electronics	130	140	150	160	170

1. Use INDEX and MATCH to find the sales for Product C in March.
2. Use INDEX and MATCH to find the category for Product E.
3. Use INDEX and MATCH to find the maximum sales for Product B across all months.
4. Use INDEX and MATCH to find the month with the maximum sales for Product A.
5. Use INDEX, MATCH, and SUMIF to sum the sales for all products in the "Electronics" category for April.
6. Use INDEX and MATCH to calculate the average sales for Product D across all months.
7. Use INDEX and MATCH to find the sales for Product ID 105 in May.
8. Use INDEX and MATCH to create a dynamic lookup where the user can input a product and a month, and the formula returns the corresponding sales.

Q.1) Use INDEX and MATCH to find the sales for Product C in March.

The screenshot shows an Excel spreadsheet titled "Assignment-3 (Index Vs Match) - Excel". The worksheet contains the same data table as above. In cell K3, the text "Product C in march" is entered. In cell K4, the value "220" is displayed. A yellow callout box points to cell K4 with the formula: `=INDEX(F1:F7,MATCH(F4,A4:H4,0))`. The spreadsheet interface includes the ribbon (File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help) and the status bar at the bottom shows "Sales_Data" and "Q.1".

Q.2) Use INDEX and MATCH to find the category for Product E.

Assignment-3_(Index Vs Match) - Excel

Search

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File Home Insert Page Layout Formulas Data Review View Help

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 A A

B I U

General

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

Sort & Find & Filter Select

C8

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales			Category for Product E							
2	101	Prod A	Electronics	120	130	140	150	160			Furniture							
3	102	Prod B	Furniture	150	160	170	180	190										
4	103	Prod C	Electronics	200	210	220	230	240										
5	104	Prod D	Clothing	90	100	110	120	130										
6	105	Prod E	Furniture	220	230	240	250	260										
7	106	Prod F	Electronics	130	140	150	160	170										
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Formula:
=INDEX(C1:C7,MATCH(C6,A6:H6,0))

Q.3) Use INDEX and MATCH to find the maximum sales for Product B across all months.

Assignment-3_(Index Vs Match) - Excel

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General

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

Sort & Find & Filter Select

K1

maximum sales for Product B

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales			maximum sales for Product B					
2	101	Prod A	Electronic	120	130	140	150	160			across all months.					
3	102	Prod B	Furniture	150	160	170	180	190			190					
4	103	Prod C	Electronic	200	210	220	230	240								
5	104	Prod D	Clothing	90	100	110	120	130								
6	105	Prod E	Furniture	220	230	240	250	260								
7	106	Prod F	Electronic	130	140	150	160	170								
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Formula:
=MAX(INDEX(D2:H7,MATCH(B3,B2:B7,0),0))

Q.4) Use INDEX and MATCH to find the month with the maximum sales for Product A.

Assignment-3_(Index Vs Match) - Excel

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D18

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales			Month with the maximum sales for Product A							
2	101	Prod A	Electronics	120	130	140	150	160			May Sales							
3	102	Prod B	Furniture	150	160	170	180	190										
4	103	Prod C	Electronics	200	210	220	230	240										
5	104	Prod D	Clothing	90	100	110	120	130										
6	105	Prod E	Furniture	220	230	240	250	260										
7	106	Prod F	Electronics	130	140	150	160	170										
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Formula:
=INDEX(D1:H1,MATCH(MAX(INDEX(D2:H7,MATCH(B2:B7,0,0)),INDEX(D2:H7,MATCH(B2:B7,0,0),0)),INDEX(D2:H7,MATCH(B2:B7,0,0),0)))

Q.5) Use INDEX, MATCH, and SUMIF to sum the sales for all products in the "Electronics" category for April.

Assignment-3_(Index Vs Match) - Excel

Search

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C9

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales			Sales for all products in "Electronics" category in April							
2	101	Prod A	Electronics	120	130	140	150	160			540							
3	102	Prod B	Furniture	150	160	170	180	190										
4	103	Prod C	Electronics	200	210	220	230	240										
5	104	Prod D	Clothing	90	100	110	120	130										
6	105	Prod E	Furniture	220	230	240	250	260										
7	106	Prod F	Electronics	130	140	150	160	170										
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Formula:
=SUMIF(C2:C7,"Electronics",INDEX(D2:H7,0,MATCH(G1,D1:H1,0)))

Q.6) Use INDEX and MATCH to calculate the average sales for Product D across all months.

Assignment-3_(Index Vs Match) - Excel

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K18

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales			Average sales for Product D across all months.						
2	101	Prod A	Electronic	120	130	140	150	160									
3	102	Prod B	Furniture	150	160	170	180	190									
4	103	Prod C	Electronic	200	210	220	230	240									
5	104	Prod D	Clothing	90	100	110	120	130									
6	105	Prod E	Furniture	220	230	240	250	260									
7	106	Prod F	Electronic	130	140	150	160	170									
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Formula:
=AVERAGE(INDEX(D5:H5,MATCH(B5,B5:H5,0),0))

Q.7) Use INDEX and MATCH to find the sales for Product ID 105 in May.

FileHomeInsertPage LayoutFormulasDataReviewViewHelp

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General\$%&NumberConditional FormattingFormat as TableCell StylesInsertDeleteFormatSort & Find & FilterFilterSelect

E19

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales			Sales for Product ID 105 in May						
2	101	Prod A	Electronic	120	130	140	150	160									
3	102	Prod B	Furniture	150	160	170	180	190									
4	103	Prod C	Electronic	200	210	220	230	240									
5	104	Prod D	Clothing	90	100	110	120	130									
6	105	Prod E	Furniture	220	230	240	250	260									
7	106	Prod F	Electronic	130	140	150	160	170									
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Formula:

=INDEX(D2:H7,MATCH(A6,A2:A7,0),MATCH(H1,D1:H1,0))

Q.8) Use INDEX and MATCH to create a dynamic lookup where the user can input a product and a month, and the formula returns the corresponding sales.

Assignment-3_(Index Vs Match) - Excel

Dynamic lookup where user can input a product and a month

ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales
101	Prod A	Electronics	120	130	140	150	160
102	Prod B	Furniture	150	160	170	180	190
103	Prod C	Electronics	200	210	220	230	240
104	Prod D	Clothing	90	100	110	120	130
105	Prod E	Furniture	220	230	240	250	260
106	Prod F	Electronics	130	140	150	160	170

Product: Prod C, Month: Apr Sales, Sales: 230

Formula: `=INDEX(B2:H7,MATCH(K4,B2:B7,0),MATCH(L4,B1:H1,0))`

Assignment-3_(Index Vs Match) - Excel

Dynamic lookup where user can input a product and a month

ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales
101	Prod A	Electronics	120	130	140	150	160
102	Prod B	Furniture	150	160	170	180	190
103	Prod C	Electronics	200	210	220	230	240
104	Prod D	Clothing	90	100	110	120	130
105	Prod E	Furniture	220	230	240	250	260
106	Prod F	Electronics	130	140	150	160	170

Product: Prod C, Month: Apr Sales, Sales: 230

Formula: `=INDEX(B2:H7,MATCH(K4,B2:B7,0),MATCH(L4,B1:H1,0))`

Assignment-3_(Index Vs Match) - Excel

Dynamic lookup where user can input a product and a month

ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Apr Sales	May Sales
101	Prod A	Electronics	120	130	140	150	160
102	Prod B	Furniture	150	160	170	180	190
103	Prod C	Electronics	200	210	220	230	240
104	Prod D	Clothing	90	100	110	120	130
105	Prod E	Furniture	220	230	240	250	260
106	Prod F	Electronics	130	140	150	160	170

Product: Prod B, Month: Mar Sales, Sales: 170

Formula: `=INDEX(B2:H7,MATCH(K4,B2:B7,0),MATCH(L4,B1:H1,0))`