Nehashri Prakash Dusa

DATA VISUALIZATION

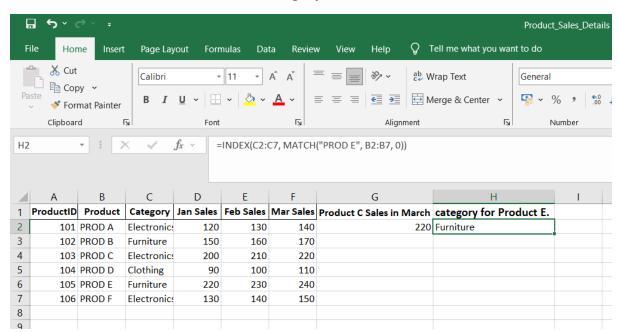# INDEX AND MATCH ASSIGNMENT

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

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 ProductID 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
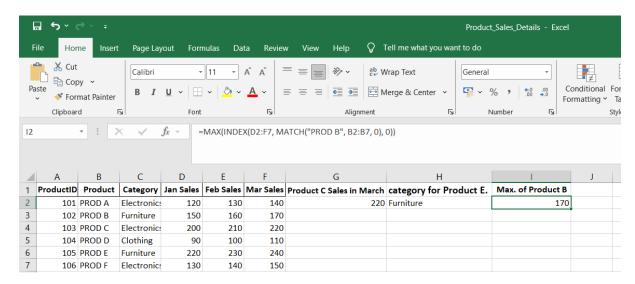
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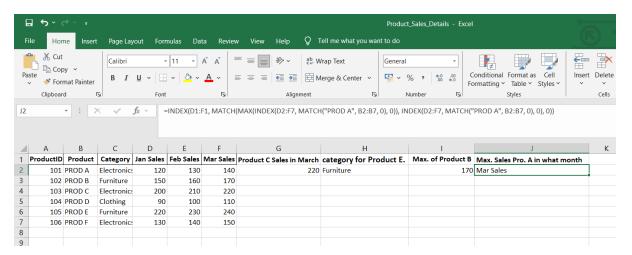## 1. Use INDEX and MATCH to find the sales for Product C in March

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.

Formula bar: `=MAX(INDEX(D2:F7, MATCH("PROD B", B2:B7, 0), 0))`

	A	B	C	D	E	F	G	H	I	J
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Product C Sales in March	category for Product E.	Max. of Product B	
2	101	PROD A	Electronics	120	130	140	220	Furniture	170	
3	102	PROD B	Furniture	150	160	170				
4	103	PROD C	Electronics	200	210	220				
5	104	PROD D	Clothing	90	100	110				
6	105	PROD E	Furniture	220	230	240				
7	106	PROD F	Electronics	130	140	150				

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

Formula bar: `=INDEX(D1:F1, MATCH(MAX(INDEX(D2:F7, MATCH("PROD A", B2:B7, 0), 0)), INDEX(D2:F7, MATCH("PROD A", B2:B7, 0), 0), 0))`

	A	B	C	D	E	F	G	H	I	J	K
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Product C Sales in March	category for Product E.	Max. of Product B	Max. Sales Pro. A in what month	
2	101	PROD A	Electronics	120	130	140	220	Furniture	170	Mar Sales	
3	102	PROD B	Furniture	150	160	170					
4	103	PROD C	Electronics	200	210	220					
5	104	PROD D	Clothing	90	100	110					
6	105	PROD E	Furniture	220	230	240					
7	106	PROD F	Electronics	130	140	150					
8											
9											

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

Formula bar: `=SUMIF(C2:C7, C4, G2:G7)`

	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	April Sales	1st ques		2ndques		3rd ques		4rd ques		5th ques
2	101	PROD A	Electronics	120	130	140	150	220		Furniture		170		Mar Sales		560
3	102	PROD B	Furniture	150	160	170	200									
4	103	PROD C	Electronics	200	210	220	230	8th quest								
5	104	PROD D	Clothing	90	100	110	230	Mar Sales	PROD B		170					
6	105	PROD E	Furniture	220	230	240	240									
7	106	PROD F	Electronics	130	140	150	180				170					

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

Formula bar: `=AVERAGE(INDEX(D2:F7, MATCH("PROD D", B2:B7, 0), 0))`

	A	B	C	D	E	F	G	H
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Average of Product D	
2	101	PROD A	Electronics	120	130	140	100	
3	102	PROD B	Furniture	150	160	170		
4	103	PROD C	Electronics	200	210	220		
5	104	PROD D	Clothing	90	100	110		
6	105	PROD E	Furniture	220	230	240		
7	106	PROD F	Electronics	130	140	150		
8								

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

Formula bar: `=INDEX(D2:F7, MATCH(105, A2:A7, 0), MATCH("Mar Sales", D1:F1, 0))`

	A	B	C	D	E	F	G	H
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	Average of Product D	Product ID 105 in May.
2	101	PROD A	Electronics	120	130	140	100	240
3	102	PROD B	Furniture	150	160	170		
4	103	PROD C	Electronics	200	210	220		
5	104	PROD D	Clothing	90	100	110		
6	105	PROD E	Furniture	220	230	240		
7	106	PROD F	Electronics	130	140	150		
8								
9								

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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**

K5 | fx =INDEX(D2:G7, MATCH(J5, B2:B7, 0), MATCH(I5, D1:G1, 0))

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ProductID	Product	Category	Jan Sales	Feb Sales	Mar Sales	April Sales	1st ques		2ndques		3rd ques		4rd ques
2	101	PROD A	Electronics	120	130	140	150		220	Furniture		170		Mar Sale
3	102	PROD B	Furniture	150	160	170	200							
4	103	PROD C	Electronics	200	210	220	230		8th quest					
5	104	PROD D	Clothing	90	100	110	230		Mar Sales	PROD B	170			
6	105	PROD E	Furniture	220	230	240	240							
7	106	PROD F	Electronics	130	140	150	180				170			