DATA VISUALIZATION

Lab_Assinment_3

Topic : Index Vs Match

.

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

Questions :
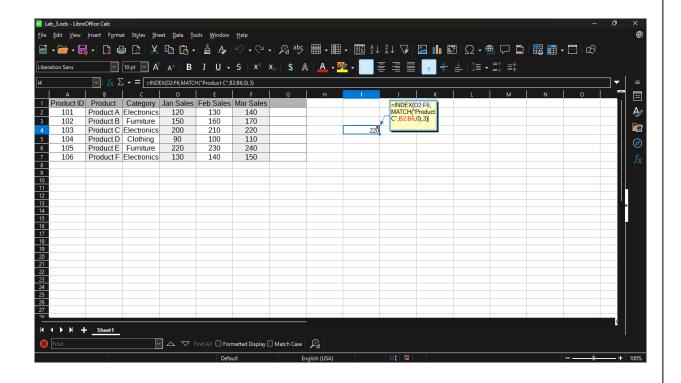
1. Use INDEX and MATCH to find the sales for Product C in March.

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

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

Solution :

Formula Syntax : =INDEX(B2:D4, MATCH("Product C", A2:A4, 0), MATCH("March", B1:D1, 0))

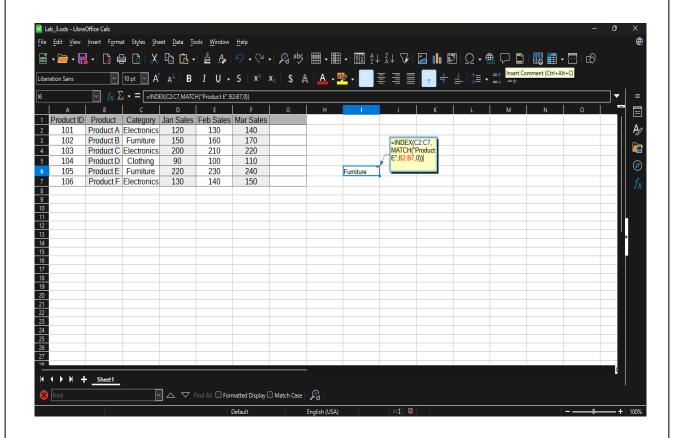**Formula Used :** =INDEX(D2:F6,MATCH("Product C",B2:B6,0),3)

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

Solution :

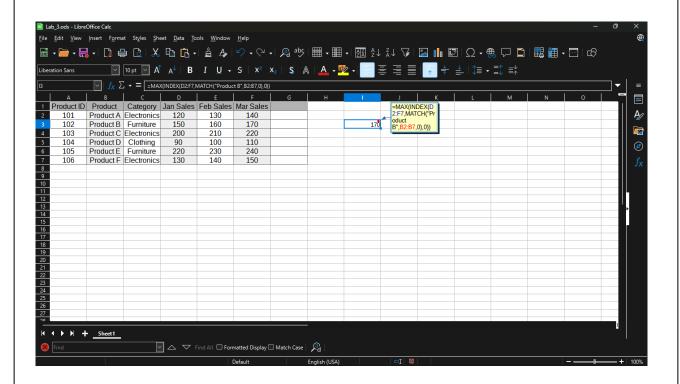**Formula Syntax :** =INDEX(B2:B6, MATCH("Product E", A2:A6, 0))

Formula Used : =INDEX(C2:C7,MATCH("Product E",B2:B7,0))

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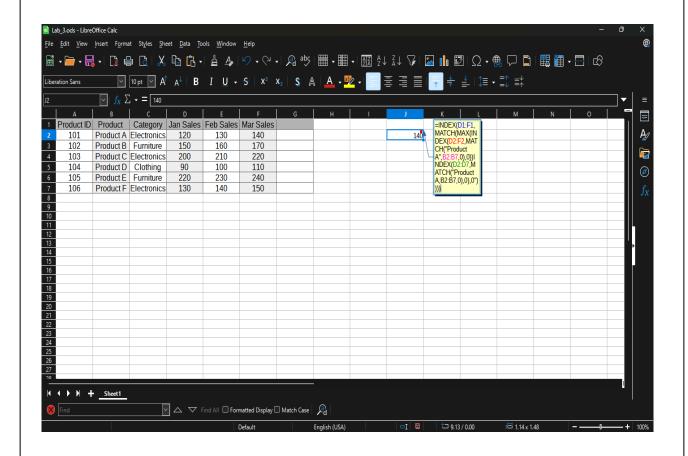
Solution :

Formula Used : =MAX(INDEX(D2:F7,MATCH("Product B",B2:B7,0),0))

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Product ID	Product	Category	Jan Sales	Feb Sales	Mar Sales									
2	101	Product A	Electronics	120	130	140									
3	102	Product B	Furniture	150	160	170			170	=MAX(INDEX(D2:F7,MATCH("Product B",B2:B7,0),0))					
4	103	Product C	Electronics	200	210	220									
5	104	Product D	Clothing	90	100	110									
6	105	Product E	Furniture	220	230	240									
7	106	Product F	Electronics	130	140	150									

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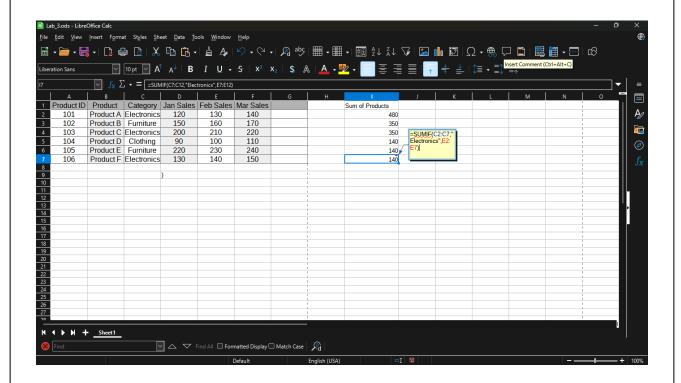
Solution :

Formula Used : =INDEX(D1:F1, MATCH(MAX(INDEX(D2:F6, MATCH("PROD A", B2:B6, 0), 0)), INDEX(D2:F6, MATCH("PROD A", B2:B6, 0), 0), 0))

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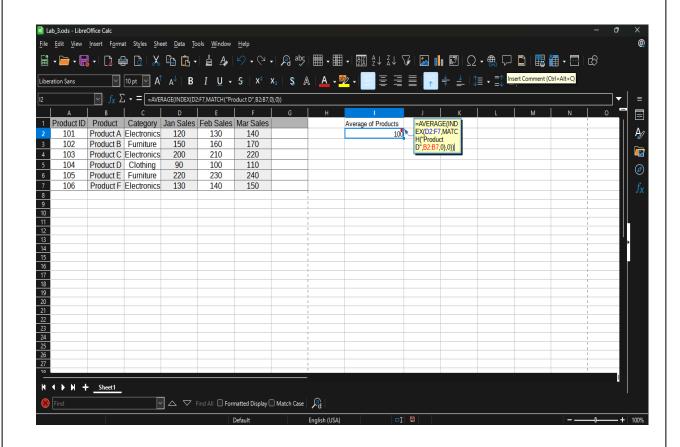
Solution :

Formula Used : =SUMIF(C7:C12,"Electronics",E7:E12)

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

Solution :

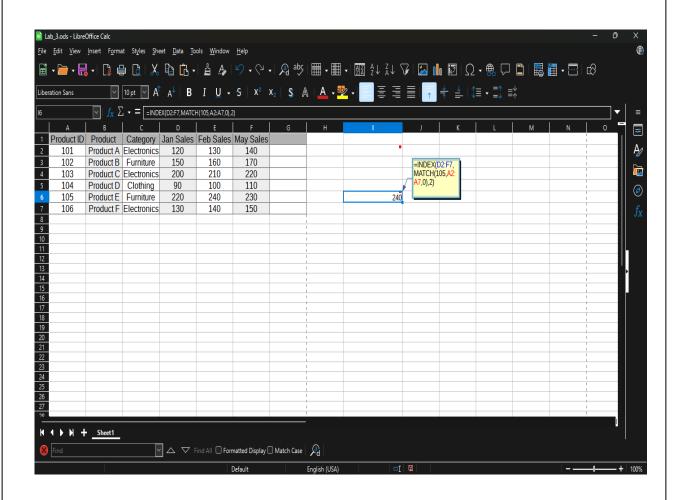**Formula Used :** =AVERAGE(INDEX(D2:F7,MATCH("Product D",B2:B7,0),0))

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

Solution :

Formula Used : =INDEX(D2:F7,MATCH(105,A2:A7,0),2)

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

Solution :

Formula Used : INDEX(D2:F7,MATCH(G2,B2:B7,0),MATCH(G3,D1:F1,0))