

# DATA VISUALIZATION

**Topic :** HLOOKUP ( Horizhantal lookup function )

## Questions :

1. Use HLOOKUP to find the sales for Product A in March.
2. Use HLOOKUP to find the sales for Product D in May.
3. Use HLOOKUP to find the sales for Product C in February.
4. Use HLOOKUP to find the sales for each month for a product, then calculate the total sales for that product.
5. Use HLOOKUP to find the maximum sales value for Product B across all months.
6. Use HLOOKUP to find the minimum sales value for Product F across all months.
7. Use HLOOKUP to find the average sales value for Product E across all months.

1) Use HLOOKUP to find the sales for Product A in March.

**Formula Syntax :** =HLOOKUP("March", A1:D4, 2, FALSE)

**Formula Used :** =HLOOKUP(D2,D2:D7,1,0)

Product	Jan	Feb	Mar	April	May	Product Sale
Product A	120	200	220	210	120	200
Product B	200	220	220	210	210	210
Product C	220	210	230	230	120	230
Product D	140	130	240	100	130	240
Product E	100	150	250	130	140	250
Product F	130	160	110	120	150	110

2. Use HLOOKUP to find the sales for Product D in May.

**Solution :**

**Formula Syantax :** =HLOOKUP("May", A1:D4, 2, FALSE)

**formula used :** =HLOOKUP(F3,F2:F7,1,0)

Product	Jan	Feb	Mar	April	May
Product A	120	120	210	120	200
Product B	200	220	220	210	210
Product C	220	210	230	230	120
Product D	140	130	240	100	130
Product E	100	150	250	130	140
Product F	130	160	110	120	150

Product Sale in May: 200

Formula: =HLOOKUP(F3,F2:F7,1,0)

### 3. Use HLOOKUP to find the sales for Product C in February.

**Solution :**

**Formula :** =HLOOKUP("May", A1:D4, 2, FALSE)

**Formula Used :** =HLOOKUP(C3,C2:C7,1,0)

The screenshot shows a spreadsheet with the following data:

Product	Jan	Feb	Mar	April	May	June
Product A	120	120	210	120	200	
Product B	200	220	220	210	210	
Product C	220	210	230	230	120	
Product D	140	130	240	100	130	
Product E	100	150	250	130	140	
Product F	130	160	110	120	150	

The formula bar shows: `=HLOOKUP(C3,C2:C7,1,0)`. The formula is being applied to cell H3, which currently displays the value 120. The formula is designed to look for the value in cell C3 (Product B) within the first row of the data range (C2:C7) and return the corresponding value (120).

**4. Use HLOOKUP to find the sales for each month for a product, then calculate the total sales for that product.**

**Solution :** Formula for total sale

**Formula Syntax :** `=HLOOKUP("January", A1:D4, 2, FALSE) + HLOOKUP("February", A1:D4, 2, FALSE) + HLOOKUP("March", A1:D4, 2, FALSE)`

**Formula Used :** `=HLOOKUP(B2,B2:B7,1,0)+HLOOKUP(C2,C2:C7,1,0)+HLOOKUP(D2,D2:D7,1,0)`

Book1-Hlookup (1).xlsx - LibreOffice Calc

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Calibri 11 pt B I U A

HLOOKUP  $\text{fx}$   $\text{X}$   $\text{✓}$   $\text{=HLOOKUP(B6:B6:B11,1,0)+HLOOKUP(C6:C6:C11,1,0)+HLOOKUP(D6:D6:D11,1,0)}$

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Product	Jan	Feb	Mar			Product sale in Jan	Product Sale in Feb	Product sale in Mar		Total Sale				
2	Product A	120	120	210			120	120	210		450				
3	Product B	200	220	220			200	220	220		640				
4	Product C	220	210	230			220	210	230		660				
5	Product D	140	130	240			140	130	240		510				
6	Product E	100	150	250			100	150	250		$\text{=HLOOKUP(B6:B6:B11,1,0)+HLOOKUP(C6:C6:C11,1,0)+HLOOKUP(D6:D6:D11,1,0)}$				
7	Product F	130	160	110			130	160	110						

First We Calculate The product sale for each month

Total sale for each Product

Sheet1 | Sheet3 | Sheet4 | Sheet5 | Sheet2 | Sheet6

Find Find All Formatted Display Match Case

Sheet 6 of 6 Default English (USA) Average: 500 Sum: 500 90%

**5. Use HLOOKUP to find the maximum sales value for Product B across all months.**

**Solution :**

**Formula Syntax :**  $\text{=MAX(HLOOKUP("Product B", A1:G2, 2, FALSE))}$

**Formula Used :**  $\text{=MAX(B3:F3)}$

Book1-Hookup (1).xlsx - LibreOffice Calc

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Calibri 11 pt B I U A % 00 00 00

MAX fx X ✓ =MAX(B3:F3)

Product	Jan	Feb	Mar	April	May		Max Product Sale
Product A	120	120	210	120	120		
Product B	200	220	220	220	230		230
Product C	220	210	230	210	220	TR x 5 C	
Product D	140	130	240	240	210		
Product E	100	150	250	150	250		
Product F	130	160	110	160	260		

Formula Used for to conclude  
Max Product sale of B is  
=MAX(B3:F3)

Sheet1 | Sheet3 | Sheet4 | Sheet5 | Sheet2 | Sheet6 | Sheet7

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Sheet 7 of 7 Default English (USA) Average: Sum: 0 120%

**6. Use HLOOKUP to find the minimum sales value for Product F across all months.**

**Solution :**

**Formula Syntax :** =MIN(HLOOKUP("Product F", A1:G4, 3, FALSE))

**Formula Used :** MIN(B7:F7)

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Calibri 11 pt A B I U S X<sup>2</sup> X<sub>2</sub> S A A

H7  $\sum$  =MIN(B7:F7)

Product	Jan	Feb	Mar	April	May		Min Product Sale
Product A	120	120	210	120	120		
Product B	200	220	220	220	230		
Product C	220	210	230	210	220		
Product D	140	130	240	240	210		
Product E	100	150	250	150	250		
Product F	130	160	110	160	260		110

Min Product sale across all Months by using formula MIN(B7:F7)

Sheet1 | Sheet3 | Sheet4 | Sheet5 | Sheet2 | Sheet6 | Sheet7

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Default English (USA) 120%

**7. Use HLOOKUP to find the average sales value for Product E across all months.**

**Solution :**

**Formula Syntax :** =AVERAGE(HLOOKUP("Product E", A1:G6, 5, FALSE))

**Formula Used :** =AVERAGE(HLOOKUP(B6,B6:F6,1,0))

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Calibri 11 pt B I U A % 0.0 0.00 0.00

H7  $\sum$  =AVERAGE(HLOOKUP(B6:B6:F6,1,0))

	A	B	C	D	E	F	G	H	I	J	K	L
1	Product	Jan	Feb	Mar	April	May		Average Product Sale				
2	Product A	120	120	210	120	120						
3	Product B	200	220	220	220	230						
4	Product C	220	210	230	210	220						
5	Product D	140	130	240	240	210						
6	Product E	100	150	250	150	250						
7	Product F	130	160	110	160	260						
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Formula Used for to calculate average across all months is  
=AVERAGE(HLOOKUP(B6:B6:F6,1,0))

180  
100

Sheet1 | Sheet3 | Sheet4 | Sheet5 | Sheet2 | Sheet6 | Sheet7

Find Find All Formatted Display Match Case

Sheet 7 of 7 Default English (USA) Average: 100 Sum: 100 120%