

## Data Visualization

### Lab Assignment: 02

#### Topic: HLOOKUP (MS Excel Function)

Product Name	Jan	Feb	Mar	Apr	May
Product A	120	130	140	150	160
Product B	150	160	170	180	190
Product C	200	210	220	230	240
Product D	90	100	110	120	130
Product E	220	230	240	250	260
Product F	130	140	150	160	170

#### 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.

## Solutions:

### Created drop down list for Product Name and Month:

H	I	J
Product Name	Month	Sales
Product D	May	130
Product A		
Product B		
Product C		
Product D		
Product E		
Product F		

H	I	J
Product Name	Month	Sales
Product D	May	130
	Jan	
	Feb	
	Mar	
	Apr	
	May	

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

Formula: **=HLOOKUP(I2,B1:F7,MATCH(H2,A2:A7,0)+1,FALSE)**

Output:

The screenshot shows the Microsoft Excel interface with the following data and formula:

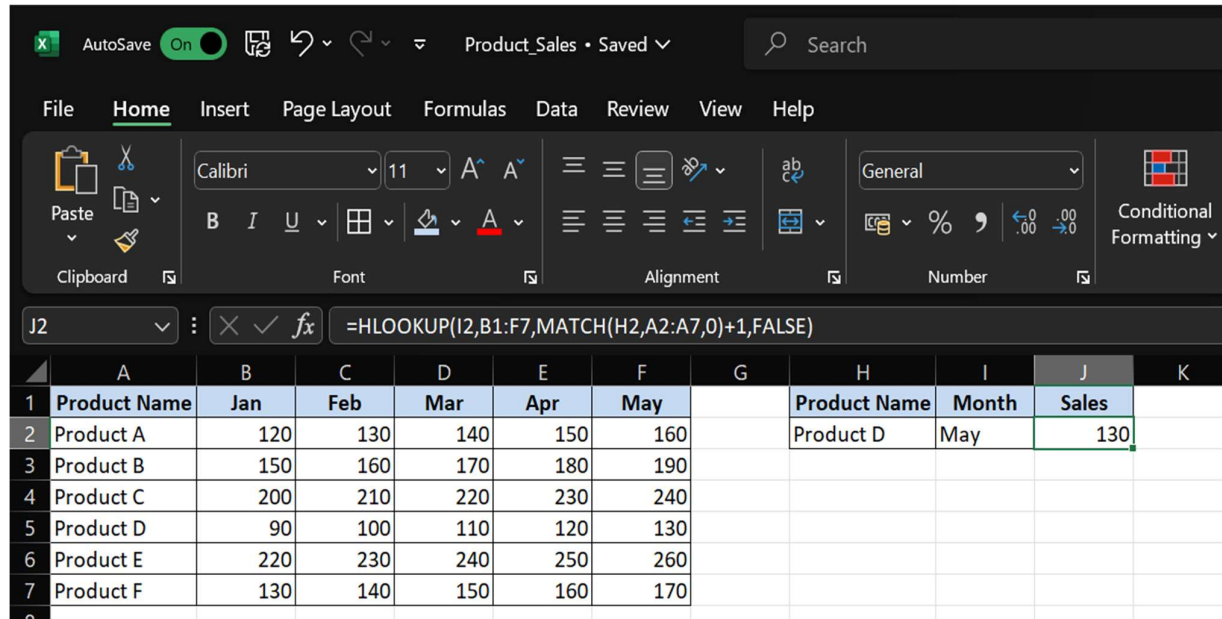
	A	B	C	D	E	F	G	H	I	J
1	Product Name	Jan	Feb	Mar	Apr	May		Product Name	Month	Sales
2	Product A	120	130	140	150	160		Product A	Mar	140
3	Product B	150	160	170	180	190				
4	Product C	200	210	220	230	240				
5	Product D	90	100	110	120	130				
6	Product E	220	230	240	250	260				
7	Product F	130	140	150	160	170				
8										

The formula bar shows the formula: **=HLOOKUP(I2,B1:F7,MATCH(H2,A2:A7,0)+1,FALSE)**

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

Formula: **=HLOOKUP(I2,B1:F7,MATCH(H2,A2:A7,0)+1,FALSE)**

Output:

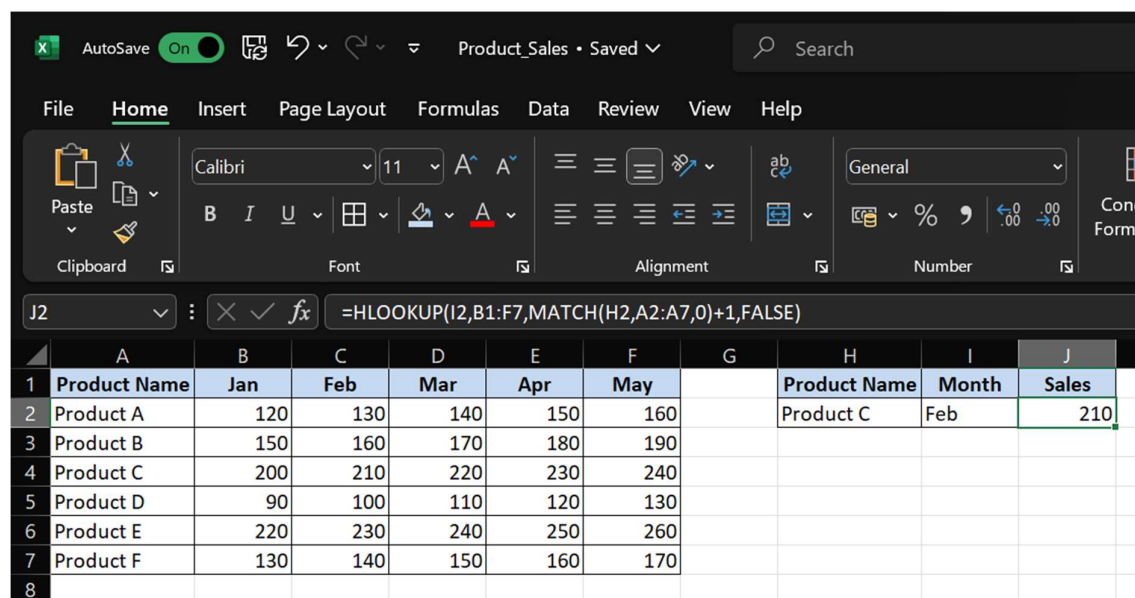


	A	B	C	D	E	F	G	H	I	J	K
1	Product Name	Jan	Feb	Mar	Apr	May		Product Name	Month	Sales	
2	Product A	120	130	140	150	160		Product D	May	130	
3	Product B	150	160	170	180	190					
4	Product C	200	210	220	230	240					
5	Product D	90	100	110	120	130					
6	Product E	220	230	240	250	260					
7	Product F	130	140	150	160	170					
8											

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

Formula: **=HLOOKUP(I2,B1:F7,MATCH(H2,A2:A7,0)+1,FALSE)**

Output:

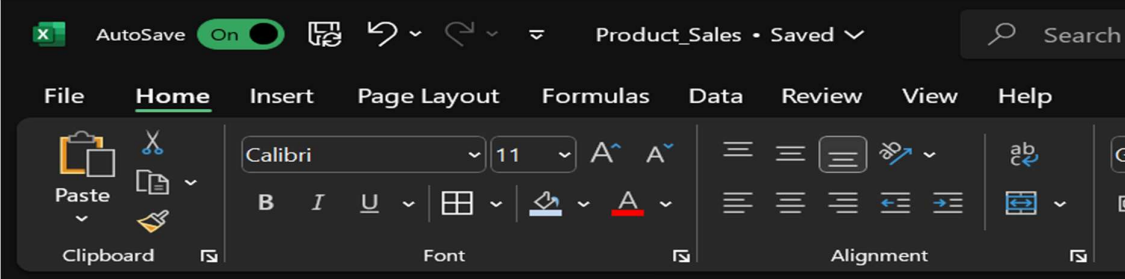


	A	B	C	D	E	F	G	H	I	J	K
1	Product Name	Jan	Feb	Mar	Apr	May		Product Name	Month	Sales	
2	Product A	120	130	140	150	160		Product C	Feb	210	
3	Product B	150	160	170	180	190					
4	Product C	200	210	220	230	240					
5	Product D	90	100	110	120	130					
6	Product E	220	230	240	250	260					
7	Product F	130	140	150	160	170					
8											

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

Formula: **=SUM(B2:F2)**

Output:



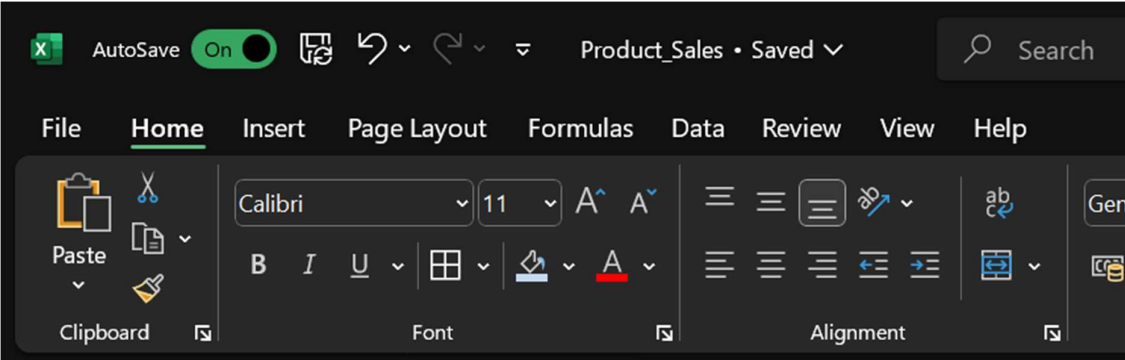
The screenshot shows the Excel interface with the 'Home' tab selected. The formula bar displays `=SUM(B2:F2)` for cell G2. The spreadsheet contains the following data:

	A	B	C	D	E	F	G	H
1	Product Name	Jan	Feb	Mar	Apr	May	Total Sale	
2	Product A	120	130	140	150	160	700	
3	Product B	150	160	170	180	190	850	
4	Product C	200	210	220	230	240	1100	
5	Product D	90	100	110	120	130	550	
6	Product E	220	230	240	250	260	1200	
7	Product F	130	140	150	160	170	750	
8								

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

Formula: **=MAX(Sheet2!B3:F3)**

Output:



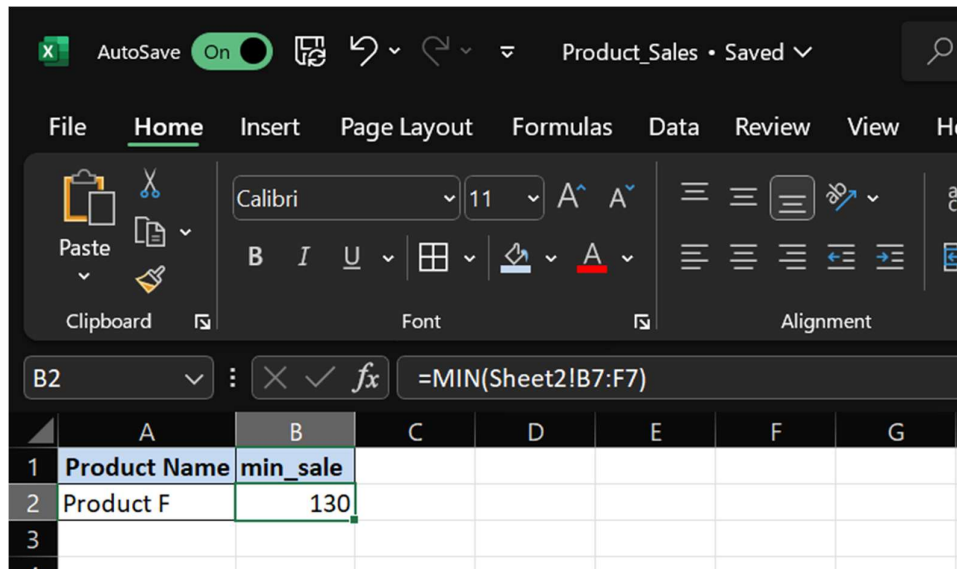
The screenshot shows the Excel interface with the 'Home' tab selected. The formula bar displays `=MAX(Sheet2!B3:F3)` for cell B2. The spreadsheet contains the following data:

	A	B	C	D	E	F	G	H
1	Product Name	max_sale						
2	Product B	190						
3								

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

Formula: **=MIN(Sheet2!B7:F7)**

Output:



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

Formula: **=AVERAGE(Sheet2!B6:F6)**

Output:

