

Lab assignment 2

1. Use VLOOKUP to find the product names for each ProductID in the Orders worksheet.

Ans. =VLOOKUP(B2, products!A1:C7, 2, FALSE)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderId	ProductID	Quantity	qn1	qn2	qn3	qn4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
5	4	104	3	Product D	270	Exists	81	90	270		Yes	3		
6	5	105	5	Product E	1100	Exists	198	220	1100		Yes	5		
7	6	106	6	Product F	780	Exists	117	130	780		Yes	6		
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2. Use VLOOKUP to find the price for each ProductID in the Orders worksheet, then calculate the TotalPrice by multiplying the Quantity by the Product Price.

Ans. =VLOOKUP(B2, products!\$A\$2:\$C\$7, 3, FALSE)*C2

Screenshot of Microsoft Excel showing the Orders worksheet. The formula `=VLOOKUP(B2, products!A2:C7, 3, FALSE)*C2` is entered in cell E2. The table structure includes columns for OrderId, ProductID, Quantity, and various query results (qn1-qn7). The formula is applied across the range E2:E7.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderID	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
5	4	104	3	Product D	270	Exists	81	90	270		Yes	3		
6	5	105	5	Product E	1100	Exists	198	220	1100		Yes	5		
7	6	106	6	Product F	780	Exists	117	130	780		Yes	6		

3. Use VLOOKUP to check if there are any ProductIDs in the Orders worksheet that do not exist in the Products worksheet.

Ans. =IF(ISNA(VLOOKUP(B3, products!A2:C8, 1, FALSE)), "Not Found", "Exists")

Screenshot of Microsoft Excel showing the Orders worksheet. The formula `=IF(ISNA(VLOOKUP(B3, products!A2:C8, 1, FALSE)), "Not Found", "Exists")` is entered in cell F2. The table structure is identical to the previous screenshot, with the formula applied across the range F2:F7.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderID	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
5	4	104	3	Product D	270	Exists	81	90	270		Yes	3		
6	5	105	5	Product E	1100	Exists	198	220	1100		Yes	5		
7	6	106	6	Product F	780	Exists	117	130	780		Yes	6		

4. Assume a discount of 10% is given on all products. Use VLOOKUP to find the original price and then calculate the discounted price.

Ans. =VLOOKUP(B2, products!A2:C7, 3, FALSE) * 0.9

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderId	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
5	4	104	3	Product D	270	Exists	81	90	270		Yes	3		
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=VLOOKUP(B2,products!A1:C7,3,)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderId	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
5	4	104	3	Product D	270	Exists	81	90	270		Yes	3		
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5. Use VLOOKUP to find the price for each ProductID and then calculate the order value. Find the maximum order value from the list.

Ans. =VLOOKUP(products!A2,products!A1:C7,3,)*C2

Screenshot of Microsoft Excel showing a table with data and formulas.

The table has columns labeled A through N. Columns A, B, C, D, E, F, G, H, K, L, M, and N are standard. Columns I and J are highlighted in yellow. Column I contains the formula `=VLOOKUP(products!A2,products!A1:C7,3)*C2`. Column J contains the formula `=MAX(I2:I7)`.

Table Data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderID	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
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=MAX(I2:I7)

Screenshot of Microsoft Excel showing the same table with the formula `=MAX(I2:I7)` in cell J2.

Table Data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderID	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
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6. Use VLOOKUP to find out which products from the Products worksheet have not been ordered.

Ans. =IF(ISNUMBER(VLOOKUP(B2,B1:C7, 1, FALSE)), "Yes", "No")

Screenshot of Microsoft Excel showing a table with columns A through K. Column K contains the formula `=IF(ISNUMBER(VLOOKUP(B2,B1:C7, 1, FALSE)), "Yes", "No")`. The data shows quantity values for each product ID.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderID	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
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6	5	105	5	Product E	1100	Exists	198	220	1100		Yes	5		
7	6	106	6	Product F	780	Exists	117	130	780		Yes	6		

7. Use VLOOKUP to find the Product name and summarize the total quantity sold for each product.

Ans. =SUMIF(B1:B7,B2,C1:C7)

Screenshot of Microsoft Excel showing a table with columns A through K. Column L contains the formula `=SUMIF(B1:B7,B2,C1:C7)`. The data shows quantity values for each product ID.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OrderID	ProductID	Quantity	qn1	qn2	qn3	qn 4. discount price	qn4. original price	qn5	qn5. max order value	qn6	qn7		
2	1	101	2	Product A	240	Exists	108	120	240	1100	Yes	2		
3	2	102	1	Product B	150	Exists	135	150	150		Yes	1		
4	3	103	4	Product C	800	Exists	180	200	800		Yes	4		
5	4	104	3	Product D	270	Exists	81	90	270		Yes	3		
6	5	105	5	Product E	1100	Exists	198	220	1100		Yes	5		
7	6	106	6	Product F	780	Exists	117	130	780		Yes	6		