

Order id	product	price
101	product A	120
102	product B	150
103	product C	200
104	product D	90
105	product E	220
106	product F	130

Q1. Use VLOOKUP to find the product names for each Product ID in the Orders worksheet.

**Solution-**

Step1:- Worksheet2 create a new column next to product id called product name

Step 2:- In the first row in the new column(D17) For the following formula

**=VLOOKUP(D17,Sheet15!\$B\$3:\$D\$8,2,0)**

Before is the Product id in the order worksheet **Sheet15!\$B\$3:\$D\$8** that is the range where Product id and Product name located

To indicates the column index number and 0 is for exact match.

Order id	Product id	product name	Quantity	total price
1	101	Product A	2	
2	103	Product C	1	
3	105	Product E	4	
4	106	Product F	3	
5	102	Product B	5	
6	104	Product D	6	

Q2.Use VLOOKUP to find the price for each Product ID in the Orders worksheet,then calculate the Total price by multiplying the quantity by the Product Price .

**Solution:-**

Step 1:- In worksheet2 create a new column called price

Step 2 In the first row in the new column (F4) write the following formula

**=VLOOKUP(D17,sheet10!\$B\$3:\$D\$17,3,0)**



D17 is the product id in the order worksheet three refers to the third column (Price worksheet10) in the product worksheet

Step 3:-In the total price column calculate the total price by multiplying the price and quantity

$$=(F4*G4)$$

Order id	Product id	product name	Price	Quantity	total price
1	101	Product A	120	2	240
2	103	Product C	200	1	400
3	105	Product E	220	4	880
4	106	Product F	130	3	260
5	102	Product B	150	5	750
6	104	Product D	90	6	540

Q3:- Use VLOOKUP to check if there are any ProductID in the Orders worksheet that do not exist in the Products worksheet.

Solution:-

Step1:-In worksheet 2 Product Id in product table add a new record with the product id which is not present in product table then

Step 3 In the first row of the new column with the formula

$$=IF(ISNA(VLOOKUP(D17,Sheet10!$B$3:$D$8,1,0)),"NOT FOUND","FOUND")$$

Order id	Product id	product name	Price	Quantity	total price
1	101	Product A	120	2	240
2	103	Product C	200	1	400
3	105	Product E	220	4	880
4	106	Product F	130	3	260
5	102	Product B	150	5	750
6	104		90	6	540
7	107				

Q4. Assume a discount of 10% is given on all products. Use VLOOKUP to find the original price and then calculate the discounted price.

Solution:-

Step1 :- In worksheet2 create a new column is called discounted price

Step2 :- In the first row of the new column tha J4 use the following formula

$$=F4*(1-0.1) \text{ where F4 is the price}$$



Order id	Product id	product name	Price	Quantity	total price	Product ID in Product table	Discounted price
1	101	Product A	120	2	240	Found	108
2	103	Product C	200	1	400	Found	180
3	105	Product E	220	4	880	Found	198
4	106	Product F	130	3	260	Found	117
5	102	Product B	150	5	750	Found	135
6	104		90	6	540	Found	81
7	107					Not Found	0

Q 5. Use VLOOKUP to find the price for each Product ID and then calculate the order value. Find the maximum order value from the list.

Step1:-Use the VLOOKUP formula from question 2 to get the total price

Step2:- Use the following Formula:-

**=MAX(H4:H9)**

Q6. Use VLOOKUP to find out which products from the Products worksheet have not been ordered.

Step1:- add a record in product table that is not in order table

Step2:- Create a new column named for called product ordered or not

Step3:- In the first of the new column, the following foemula is:-

**=IF(ISNA(B3,VLOOKUP2!\$D\$4:\$J\$10,1,0)),"Not ordered","Ordered")**

Order id	product	price	Product ordered or not
101	product A	120	Ordered
102	product B	150	Ordered
103	product C	200	Ordered
104	product D	90	Ordered
105	product E	220	Ordered
106	product F	130	Ordered
108	Product G	150	Not Ordered