product	price	
product A	120	
product B	150	
product C	200	
product D	90	
product E	220	
product F	130	
	product A product B product C product D product E	product A 120 product B 150 product C 200 product D 90 product E 220

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
I	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
I	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")

Orde	id	Product id	product name	Price	Quantity	total price	Product ID in	Produ
	1	101	Product A	120	2	240	Found	
	2	103	Product C	200	1	400	Found	
	3	105	Product E	220	4	880	Found	
	4	106	Product F	130	3	260	Found	
	5	102	Product B	150	5	750	Found	
	6	104		90	6	540	Found	
	7	107					Not Found	

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)** where F4 is the price

Order id	Product id	product name	Price	Quantity	total price	Product ID in Product table	Discounted price
I	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

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

Step 1: Use VLOOKUP to Find the Product Name

Step2: Formula =IF(VLOOKUP(B2, \$J\$2:\$K\$7, 2, FALSE), "")

Step 3: Summarize the Total Quantity Sold for Each Product

Example:

## **Example:**

Total Quantity Sold
2
5
1
6
4
3