

SQL- ASSIGNMENT-1 (ITEMS AND PRODCUTS DATABASE)

ITEMS_TABLE:

Item_Id	item_description	vendor_nos	vendor_name	bottle_size	bottle_price
1	Travis Hasse Apple Pie	305	Mhw Ltd	750	9.77
2	D'aristi Xtabentun	391	Anchor Distilling (preiss Imports)	750	14.12
3	Hiram Walker Peach Brandy	370	Pernod Ricard Usa/austin Nichols	1000	6.5
4	Oak Cross Whisky	305	Mhw Ltd	750	25.33
6	Uv Red(cherry) Vodka	380	Phillips Beverage Company	200	1.97
	Heaven Hill Old Style White Label	259	Heaven Hill Distilleries Inc.	750	6.37
	Hyde Herbal Liqueur	194	Fire Tail Brands Llc	750	5.06
8	Dupont Calvados Fine Reserve	403	Robert Kacher Selections	750	23.61

PRODUCTS SALES TABLE:

Product_Id Country	Product	Units Sold	Manufacturing Price	Sale Price	Gross Sales	Sales	COGS	Profit	Date	Month Number	Month Name	Year
1 Canada	Carretera	1618.5	3	20	32,370	32,370	16,185	16,185	1/1/2014	1 .	January	2014
2 Germany	Carretera	1321	3	20	26,420	26,420	13,210	13,210	1/1/2014	1 .	January	2015
3 France	Carretera	2178	3	15	32,670	32,670	21,780	10,890	6/1/2014	6	June	2016
4 Germany	Carretera	888	3	15	13,320	13,320	8,880	4,440	6/1/2014	6	June	2017
5 Mexico	Carretera	2470	3	15	37,050	37,050	24,700	12,350	6/1/2014	6	June	2018
6 Germany	Carretera	1513	3	350	529,550	529,550	393,380	136,170	12/1/2014	12	December	2019
7 Germany	Montana	921	5	15	13,815	13,815	9,210	4,605	3/1/2014	3	March	2020
8 Canada	Montana	2518	5	12	30,216	30,216	7,554	22,662	6/1/2014	6	June	2021

- 1. Create two Databases Name :- Brands , and Products
- 2. Create two tables in SQL Server name as ITEMS_TABLE in Brands database and PRODUCT_TABLE in Products database.
- 3. After Creating both the tables Add records in that tables (records are available in ITEMS_TABLE Sheet and PRODUCTS_TABLE Sheet)
- 4. Delete those product having the Units Sold 1618.5, 888 and 2470.
- 5. Select all records from the bottle_info table.
- 6. Select the item_description and bottle_price for all items in the bottle_info table.
- 7. Find the item_description and bottle_price of items where bottle_price is greater than 20.
- 8. Select Unique Country from the product_sales table
- 9. Count the number of Countries in the product_sales table
- 10. How Many Countries are there which contain the sales price between 10 to 20

Intermediate Questions

PRODUCTS_SALES_TABLE:-

1. Find the Total Sale Price and Gross Sales

- 2. In which year we have got the highest sales
- 3. Which Product having the sales of \$ 37,050.00
- 4. Which Countries lies between profit of \$ 4,605 to \$ 22,662.00
- 5. Which Product Id having the sales of \$ 24,700.00
- 6. Find the total Units Sold for each Country.
- 7. Find the average sales for each country
- 8. Retrieve all products sold in 2014
- 9. Find the maximum Profit in the product_sales table.
- 10. Retrieve the records from product_sales where Profit is greater than the average Profit of all records.
- 11. Find the item_description having the bottle size of 750
- 12. Find the vendor Name having the vendor_nos 305 , 380 ,391
- 13. What is total Bottle_price
- 14. Make Primary Key to Item_id
- 15. Which item id having the bottle price of \$ 5.06

Advance Questions:-

- 1. Apply INNER, FULL OUTER, LEFT JOIN types on both the table
- 2. Find the item_description and Product having the gross sales of 13,320.00
- 3. Split the Item_description Column into Columns Item_desc1 and Item_desc2
- 4. Find the top 3 most expensive items in the bottle_info table.
- 5. Find the total Gross Sales and Profit for each Product in each Country.
- 6. Find the vendor_name and item_description of items with a bottle_size of 750 and bottle_price less than 10.
- 7. Find the Product with the highest Profit in 2019.
- 8. Retrieve the Product_Id and Country of all records where the Profit is at least twice the COGS.
- 9. Find the Country that had the highest total Gross Sales in 2018
- 10. Calculate the total Sales for each Month Name across all years.
- 11. List the item_description and vendor_name for items whose vendor_nos exists more than once in the bottle_info table.
- 12. Find the average Manufacturing Price for Product in each Country and only include those Country and Product combinations where the average is above 3

Super-Advance Questions:-

- 1. Find the item_description and bottle_price of items that have the same vendor name as items with Item Id 1.
- 2. Create a stored procedure to retrieve all records from the bottle_info table where bottle_price is greater than a given value
- 3. Create a stored procedure to insert a new record into the product_sales table.
- 4. Create a trigger to automatically update the Gross_Sales field in the product_sales table whenever Units_Sold or Sale_Price is updated.
- 5. Write a query to find all item_description in the bottle_info table that contain the word "Whisky" regardless of case.
- 6. Write a query to find the Country and Product where the Profit is greater than the average Profit of all products.
- 7. Write a query to join the bottle_info and product_sales tables on a common field (e.g., vendor_nos) and select relevant fields from both tables.
- 8. Write a query to combine item_description and vendor_name into a single string for each record in the bottle_info table, separated by a hyphen.
- 9. Write a query to display the bottle_price rounded to one decimal place for each record in the bottle info table.
- 10. Write a query to calculate the number of days between the current date and the Date field for each record in the product sales table.