

Automobile Dashboard Analysis

Task 2 : Q & A

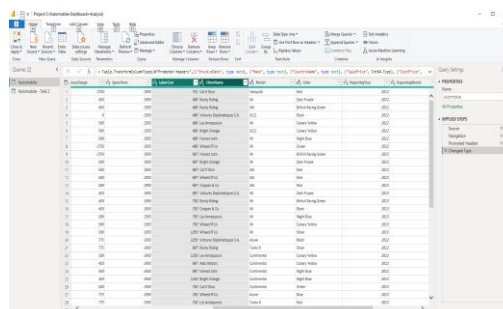
- How do you filter the data to show only records where the Make is "Jaguar"?

Ans: Go to Data or Report View in Power BI -> Drag the "Make" field to Filters or add a slicer visual -> Select only "Jaguar" to filter the dataset for that manufacturer.

InvoiceDate	Make	CountryName
Monday, November 2, 2015	Jaguar	USA
Friday, October 2, 2015	Jaguar	USA
Tuesday, September 2, 2015	Jaguar	USA
Sunday, August 2, 2015	Jaguar	USA

- How can you remove the columns ClientName and LaborCost from the dataset?

Ans: Go to Home > Transform Data (Power Query) -> Select both columns (Ctrl+click), right-click, and choose "Remove Columns." -> Click "Close & Apply" to enact the change.



InvoiceDate	Make	CountryName	SalePrice	CostPrice	TotalDiscount	DeliveryCharge	SpareParts	Model	Color	ReportingYear	ReportingMonth	Registration_Date	VehicleType
Monday, November 2, 2015	Jaguar	USA	42250	30700	350	-50	250	XX	Silver	2015	11	Tuesday, September 20, 2005	Saloon
Tuesday, September 2, 2015	Jaguar	USA	42250	30700	350	-50	250	XX	Silver	2015	10	Tuesday, September 20, 2005	Saloon

3. How can you replace the values "Coupe" with "Convertible" in the VehicleType column?

Ans: In Power Query, Select VehicleType column -> Go to Transform > Replace Values -> Enter "Coupe" (find) and "Convertible" (replace), then click OK.

Registration_Date	VehicleType
Saturday, September 1, 2001	Convertible
Friday, September 1, 2000	Convertible
Friday, September 1, 2000	Saloon
Friday, September 1, 2000	Saloon
Friday, September 1, 2000	Convertible
Friday, September 1, 2000	Saloon
Friday, September 1, 2000	Convertible
Friday, September 1, 2000	Convertible
Friday, September 1, 2000	Convertible
Sunday, June 1, 1997	Convertible
Sunday, June 1, 1997	Convertible
Wednesday, September 20, 2006	Saloon
Wednesday, September 20, 2006	Saloon
Wednesday, September 20, 2006	Saloon
Wednesday, September 20, 2006	Convertible
Wednesday, September 20, 2006	Convertible
Wednesday, September 20, 2006	Convertible
Wednesday, September 20, 2006	Saloon
Wednesday, September 20, 2006	Convertible
Wednesday, September 20, 2006	Saloon

4. How can you add a new column that calculates the total cost (CostPrice + DeliveryCharge + SpareParts + LaborCost) for each record?

Ans: In Power Query, Add Column > Custom Column ->

Formula: Total Cost (Column Name)= $[CostPrice] + [DeliveryCharge] + [SpareParts] + [LaborCost]$

	TotalCost
9131	129452
9684	27886
9684	40386
9763	27436
9684	40436
9684	27936
9763	40436
9684	29186
9684	29687
9684	40937
9763	20437

5. How can you split the InvoiceDate column into two separate columns: InvoiceYear and InvoiceMonth?

Ans: In Power Query, select InvoiceDate -> Add Column > Date > Year and Date > Month to create new columns.

Alternatively, create DAX columns:

InvoiceYear = YEAR(Automobile[InvoiceDate])
InvoiceMonth = MONTH(Automobile[InvoiceDate])

InvoiceYear	InvoiceMonth
2013	12
2012	1
2012	2
2012	3
2012	4
2012	5
2012	6
2012	7

6. How can you group the data by Make and CountryName to get the sum of SalePrice for each group?

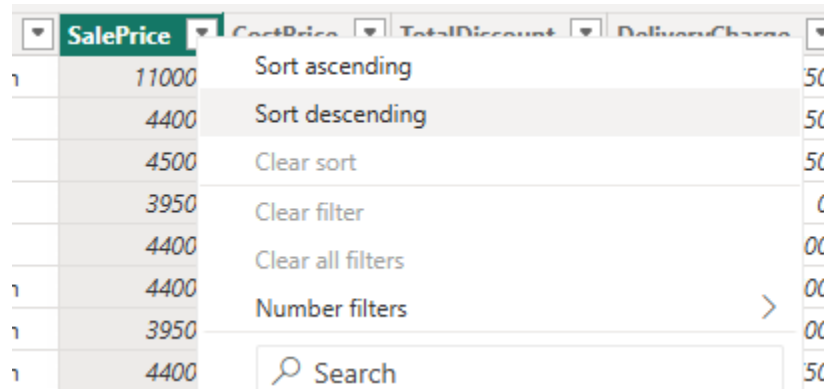
Ans: In Power Query, select both columns -> Go to Transform > Group By ->

Group By: Make, CountryName. Operation: Sum of SalePrice.

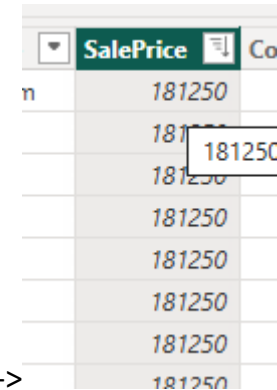
Make	CountryName	SalePrice	DataGroup
Aston Martin	United Kingdom	110000	550000
Jaguar	USA	44000	308000
Jaguar	USA	45000	45000
Jaguar	Switzerland	39500	79000
Jaguar	France	44000	88000

7. How can you sort the data by SalePrice in descending order?

Ans: In Power Query or Data View, click the down arrow in SalePrice column header. -> Choose "Sort descending."



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8. How can you merge this dataset with another table that contains additional ClientName information, using ClientName as the key?

Ans: In Power Query, Home -> Merge Queries.-> Select both tables, using ClientName as the key. -> Choose Left Outer Join to retain all original records.

Merge

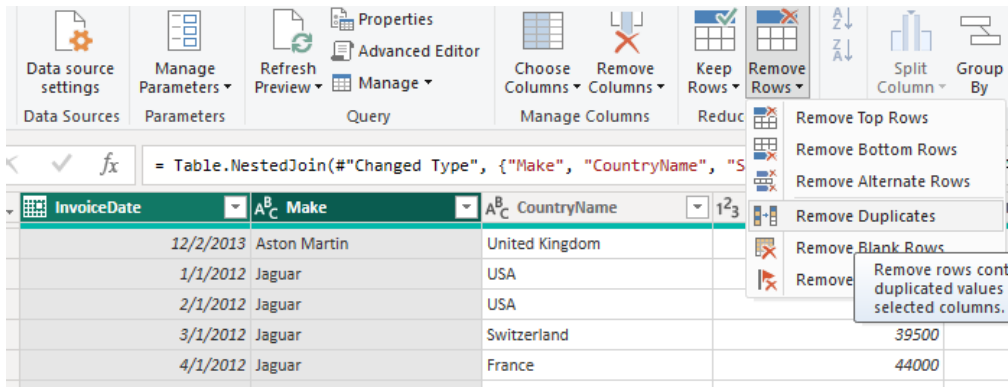
Select a table and matching columns to create a merged table.

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InvoiceDate	Make	CountryName	SalePrice	CostPrice	TotalDiscount	DeliveryCharge	SparePar
12/2/2013	Aston Martin	United Kingdom	110000	125000	0	1750	
1/1/2012	Jaguar	USA	44000	25000	500	450	
2/1/2012	Jaguar	USA	45000	37500	500	450	
3/1/2012	Jaguar	Switzerland	39500	25000	500	0	

9. How can you remove duplicate records based on the combination of InvoiceDate and Make?

Ans: In Power Query, select InvoiceDate and Make -> Go to Remove Rows > Remove Duplicates.



10. How can you pivot the Color column so that each unique color becomes a new column and the values are the SalePrice?

Ans: In Power Query, select Color column -> Go to Transform > Pivot Column. -> Set SalePrice as Values field, aggregation as Sum or Average as appropriate.

