ORDER BY, GROUP BY and Comparison of the Two

ORDER BY: Multi-field sort: City is the primary sort, Annualsales the secondary

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| SELECT RestaurantID, City, AnnualsalesFROM RestaurantsORDER BY City, Annualsales; |  |

Compare GROUP BY and ORDER BY

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| --- | --- |
| SELECT City, COUNT(RestaurantID) AS NumRestInCity, AVG(Annualsales) AS AvgSalesFROM Restaurants**GROUP BY City**; | **Twenty restaurants collapsed to 9 city groups** |

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| --- | --- |
| SELECT City, COUNT(RestaurantID) AS NumRestInCity, AVG(Annualsales) AS AvgSalesFROM RestaurantsGROUP BY City**ORDER BY AVG(Annualsales) DESC**; |  |

Aggregate function w and w/o group by

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| --- | --- |
| SELECT City, COUNT(RestaurantID) AS NumRestInCity, AVG(Annualsales) AS AvgSalesFROM Restaurants**GROUP BY City**; |  |

Without GROUP BY:

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| SELECT COUNT(RestaurantID) AS NumRestInCity, AVG(Annualsales) AS AvgSalesFROM Restaurants(There was no grouping) | The above aggregate functions are performed over **the WHOLE table**  |

GROUP BY w conditions – “HAVING”

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| --- | --- |
| SELECT City, COUNT(RestaurantID) AS NumRestInCity, AVG(Annualsales) AS AvgSalesFROM RestaurantsGROUP BY CityHAVING COUNT(RestaurantID)>2; | ONLY those cities w more than 2 restaurants were selected |