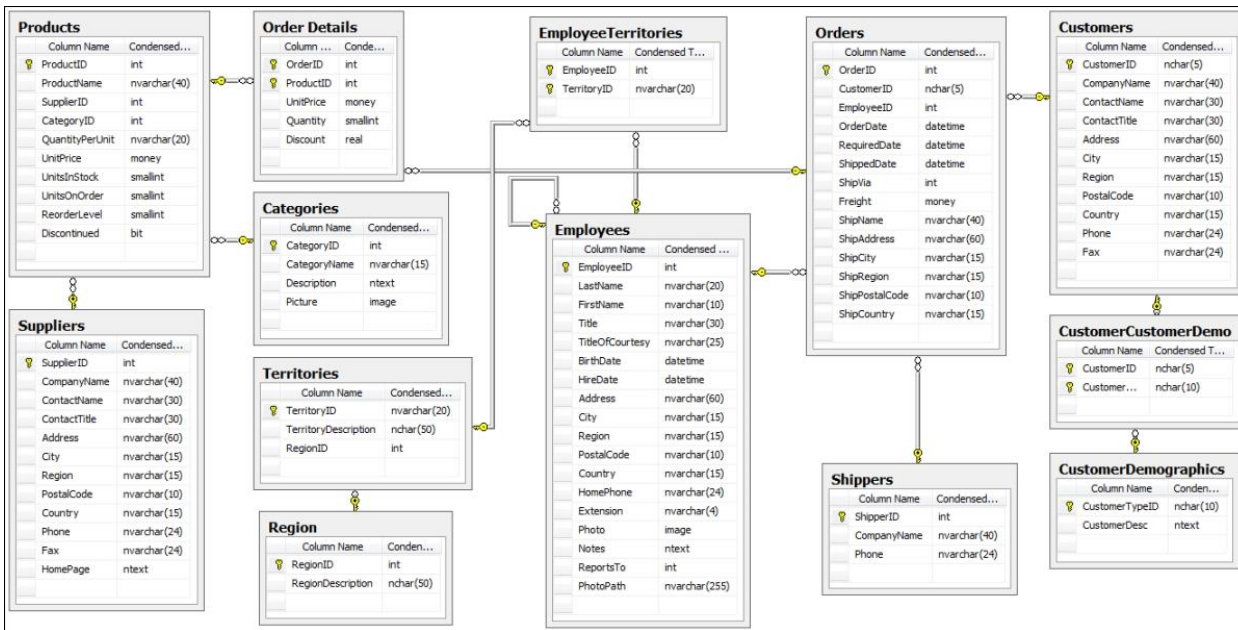


Northwind Database Model:



Part I: Create user called **northwind** identified by **root**.

Hint: Use xe connection (sys as sysdba/root) execute below command before creating user

alter session set "_ORACLE_SCRIPT"=true;

Part II: Create tables as indicated in "[Oracle Northwind CreateObjects.sql](#)".

Part III: Add records as indicated in "[Oracle Northwind InsertData.sql](#)".

Part IV: Write queries on Northwind db.

1. Get a list of latest order IDs for all customers by using the max function on Order_ID column.
2. Find suppliers who sell more than one product to Northwind Trader.
3. Create a function to get latest order date for entered customer_id
4. Get the top 10 most expensive products.

Ten_Most_Expensive_Products	UnitPrice
Côte de Blaye	263.5
Thüringer Rostbratwurst	123.79
Mishi Kobe Niku	97
Sir Rodney's Marmalade	81
Carnarvon Tigers	62.5
Raclette Courdavault	55
Manjimup Dried Apples	53
Tarte au sucre	49.3
Ipoh Coffee	46
Rössle Sauerkraut	45.6

5. Rank products by the number of units in stock in each product category.
6. Rank customers by the total sales amount within each order date
7. For each order, calculate a subtotal for each Order (identified by OrderID).

OrderID	Subtotal
10248	440.00
10249	1,863.40
10250	1,552.60
10251	654.06
10252	3,597.90
10253	1,444.80
10254	556.62
10255	2,490.50
10256	517.80
10257	1,119.90
10258	1,614.88
10259	100.80
10260	1,504.65

8. Sales by Year for each order.

Hint: Get

Subtotal as $\text{sum}(\text{UnitPrice} * \text{Quantity} * (1 - \text{Discount}))$ for every order_id then join with orders table

ShippedDate	OrderID	Subtotal	Year
1996-12-24	10389	1,832.80	1996
1996-12-24	10371	72.96	1996
1996-12-25	10386	166.00	1996
1996-12-26	10390	2,090.88	1996
1996-12-27	10370	1,117.60	1996
1996-12-30	10366	136.00	1996
1996-12-31	10391	86.40	1996
1997-01-01	10392	1,440.00	1997
1997-01-02	10397	716.72	1997
1997-01-03	10394	442.00	1997

9. Get Employee sales by country names

Country	LastName	FirstName	ShippedDate	OrderID	Sale_Amount
UK	Buchanan	Steven	1997-01-02	10397	716.72
UK	Buchanan	Steven	1997-03-06	10463	713.30
UK	Buchanan	Steven	1997-03-21	10474	1,249.10
UK	Buchanan	Steven	1997-03-25	10477	558.00
UK	Buchanan	Steven	1997-05-09	10529	946.00
UK	Buchanan	Steven	1997-05-30	10549	3,554.27
UK	Buchanan	Steven	1997-06-30	10575	2,147.40
UK	Buchanan	Steven	1997-07-11	10569	890.00
UK	Buchanan	Steven	1997-07-25	10607	6,475.40
UK	Buchanan	Steven	1997-08-29	10649	1,434.00

10. Alphabetical list of products

ProductID	ProductName	SupplierID	CategoryID	QuantityPerUnit	UnitPrice
3	Aniseed Syrup	1	2	12 - 550 ml bottles	10
40	Boston Crab Meat	19	8	24 - 4 oz tins	18.4
60	Camembert Pierrot	28	4	15 - 300 g rounds	34
18	Carnarvon Tigers	7	8	16 kg pkg.	62.5
1	Chai	1	1	10 boxes x 20 bags	18
2	Chang	1	1	24 - 12 oz bottles	19
39	Chartreuse verte	18	1	750 cc per bottle	18
4	Chef Anton's Cajun Seasoning	2	2	48 - 6 oz jars	22
48	Chocolade	22	3	10 pkgs.	12.75

11. Display the current Productlist

Hint: Discontinued='N'

ProductID	ProductName
3	Aniseed Syrup
40	Boston Crab Meat
60	Camembert Pierrot
18	Carnarvon Tigers
1	Chai
2	Chang
39	Chartreuse verte
4	Chef Anton's Cajun Seasoning
48	Chocolade
38	Côte de Blaye

12. Calculate sales price for each order after discount is applied.

OrderID	ProductID	ProductName	UnitPrice	Quantity	Discount	ExtendedPrice
10248	42	Singaporean Hokkien Fried Mee	9.8	10	0	98.00
10248	72	Mozzarella di Giovanni	34.8	5	0	174.00
10248	11	Queso Cabrales	14	12	0	168.00
10249	14	Tofu	18.6	9	0	167.40
10249	51	Manjimup Dried Apples	42.4	40	0	1696.00
10250	51	Manjimup Dried Apples	42.4	35	0.15	1261.40
10250	65	Louisiana Fiery Hot Pepper Sauce	16.8	15	0.15	214.20
10250	41	Jack's New England Clam Chowder	7.7	10	0	77.00

13. Sales by Category: For each category, we get the list of products sold and the total sales amount.

CategoryID	CategoryName	ProductName	ProductSales
1	Beverages	Chai	4887.00
1	Beverages	Chang	7038.55
1	Beverages	Chartreuse verte	4192.20
1	Beverages	Côte de Blaye	49198.08
1	Beverages	Guaraná Fantástica	1630.12
1	Beverages	Ipoh Coffee	11069.90
1	Beverages	Lakkalikööri	7379.10
1	Beverages	Laughing Lumberjack Lager	910.00
1	Beverages	Outback Lager	5468.40
1	Beverages	Rhönbräu Klosterbier	4485.54

14. Create below views:

View Name	Description
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1. vwProducts_Above_Average_Price	Displays products(productname,unitprice) who's price is greater than avg(price) <table><tr><th>ProductName</th><th>UnitPrice</th></tr><tr><td>Uncle Bob's Organic Dried Pears</td><td>30</td></tr><tr><td>Ikura</td><td>31</td></tr><tr><td>Gumbär Gummibärchen</td><td>31.23</td></tr><tr><td>Mascarpone Fabioli</td><td>32</td></tr><tr><td>Perth Pasties</td><td>32.8</td></tr><tr><td>Wimmers gute Semmelknödel</td><td>33.25</td></tr><tr><td>Camembert Pierrot</td><td>34</td></tr><tr><td>Mozzarella di Giovanni</td><td>34.8</td></tr><tr><td>Gudbrandsdalsost</td><td>36</td></tr><tr><td>Gnocchi di nonna Alice</td><td>38</td></tr><tr><td>Queso Manchego La Pastora</td><td>38</td></tr><tr><td>Alice Mutton</td><td>39</td></tr><tr><td>Northwoods Cranberry Sauce</td><td>40</td></tr></table>	ProductName	UnitPrice	Uncle Bob's Organic Dried Pears	30	Ikura	31	Gumbär Gummibärchen	31.23	Mascarpone Fabioli	32	Perth Pasties	32.8	Wimmers gute Semmelknödel	33.25	Camembert Pierrot	34	Mozzarella di Giovanni	34.8	Gudbrandsdalsost	36	Gnocchi di nonna Alice	38	Queso Manchego La Pastora	38	Alice Mutton	39	Northwoods Cranberry Sauce	40												
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2. vwQuarterly_Orders_by_Product	Display product(productname), customers(companyname), orders(orderyear)																																								
3. vwUnitsInStock	Display Supplier Continent wise sum of unitinstock. 'Europe'= ('UK','Spain','Sweden','Germany','Norway','Denmark','Netherlands','Finland','Italy','France') 'America'= 'USA','Canada','Brazil' and 'Asia-Pacific'																																								
4. vw10Most_Expensive_Products	Display top 10 expensive products																																								
5. vwCustomer_Supplier_by_City	Display customer supplier by city <table><tr><th>City</th><th>CompanyName</th><th>ContactName</th><th>Relationship</th></tr><tr><td>Aachen</td><td>Drachenblut Delikatessen</td><td>Sven Ottlieb</td><td>Customers</td></tr><tr><td>Albuquerque</td><td>Rattlesnake Canyon Grocery</td><td>Paula Wilson</td><td>Customers</td></tr><tr><td>Anchorage</td><td>Old World Delicatessen</td><td>Rene Phillips</td><td>Customers</td></tr><tr><td>Ann Arbor</td><td>Grandma Kelly's Homestead</td><td>Regina Murphy</td><td>Suppliers</td></tr><tr><td>Annecy</td><td>Gai pâturage</td><td>Eliane Noz</td><td>Suppliers</td></tr><tr><td>Århus</td><td>Vaffeljernet</td><td>Palle Ibsen</td><td>Customers</td></tr><tr><td>Barcelona</td><td>Galería del gastrónomo</td><td>Eduardo Saavedra</td><td>Customers</td></tr><tr><td>Barquisimeto</td><td>LILA-Supermercado</td><td>Carlos González</td><td>Customers</td></tr><tr><td>Bend</td><td>Bigfoot Breweries</td><td>Cheryl Saylor</td><td>Suppliers</td></tr></table>	City	CompanyName	ContactName	Relationship	Aachen	Drachenblut Delikatessen	Sven Ottlieb	Customers	Albuquerque	Rattlesnake Canyon Grocery	Paula Wilson	Customers	Anchorage	Old World Delicatessen	Rene Phillips	Customers	Ann Arbor	Grandma Kelly's Homestead	Regina Murphy	Suppliers	Annecy	Gai pâturage	Eliane Noz	Suppliers	Århus	Vaffeljernet	Palle Ibsen	Customers	Barcelona	Galería del gastrónomo	Eduardo Saavedra	Customers	Barquisimeto	LILA-Supermercado	Carlos González	Customers	Bend	Bigfoot Breweries	Cheryl Saylor	Suppliers
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