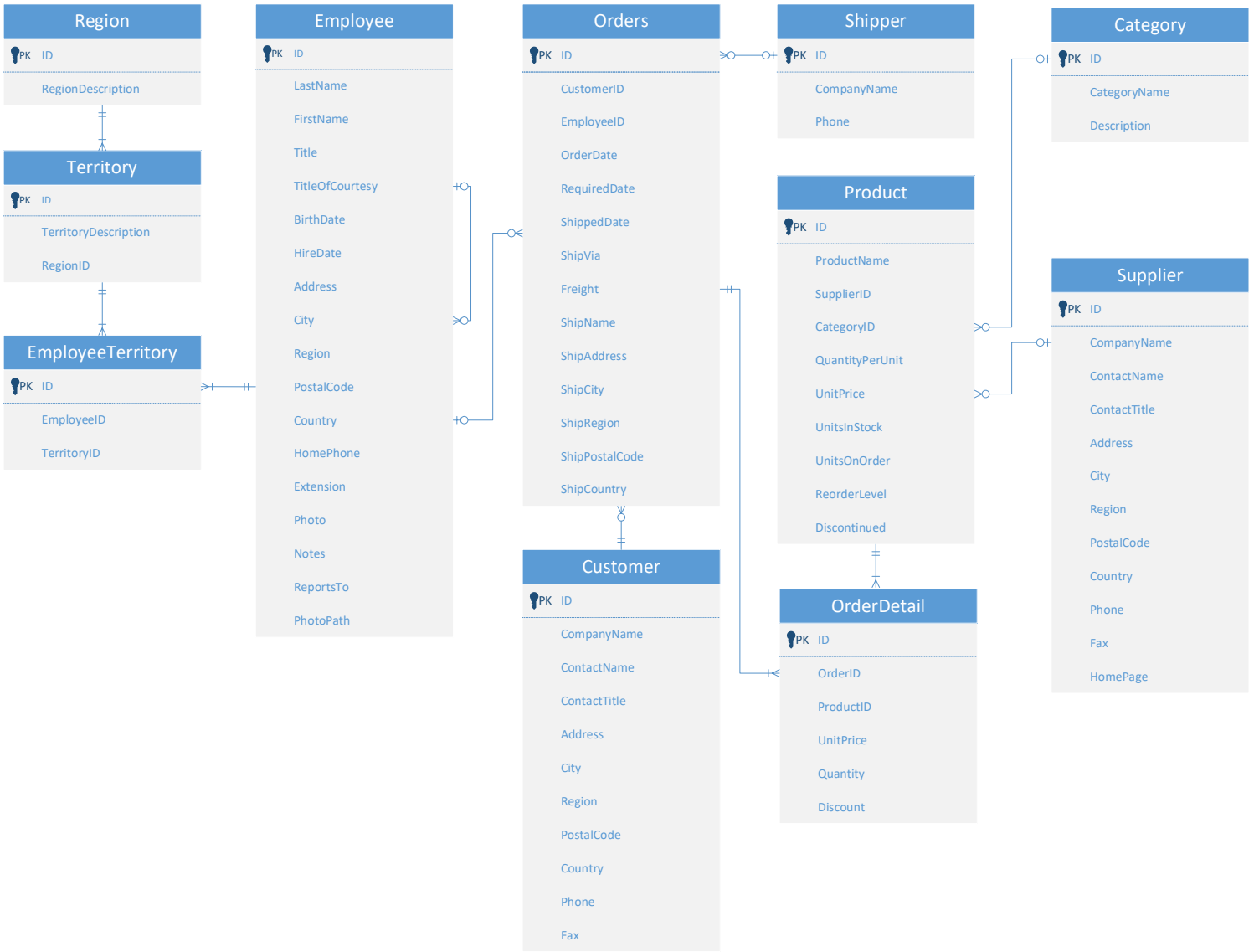
International Foods Logical Data Model



1) Create a view showing the total revenue (sales amount) per order. This is calculated as quantity * unit_price * (1-discount). The result should return OrderID and Revenue sorted by OrderID.

Internatio View name: Total_revenue

```
SELECT o1.Id, SUM(o2.Quantity * o2.UnitPrice * (1 - o2.Discount)) AS Total_revenue FROM Orders AS o1
    INNER JOIN OrderDetail AS o2
    ON o1.Id = o2.OrderId
    GROUP BY o1.Id
    ORDER BY o1.Id
```

Total rows loaded: 16818

	Id	Total_revenue
1	10248	440
2	10249	1863.4
3	10250	1552.6
4	10251	654.06
5	10252	3597.9
6	10253	1444.8000000000002
7	10254	556.6199999999999
8	10255	2490.5
9	10256	517.8
10	10257	1119.9
11	10258	1614.88
12	10259	100.8
13	10260	1504.65
14	10261	448
15	10262	584
16	10263	1873.8
17	10264	695.625
18	10265	1176
19	10266	346.55999999999995
20	10267	3536.6

2) Create a view showing the number of orders per shipper for each customer. The result should return Customer Name, Shipper Name, and number of orders sorted by number of orders in descending order.

Internatio View name: NumOrder

```
SELECT c.CompanyName AS CustomerName, s.CompanyName AS ShipperName, COUNT (*) AS NumberOfOrder
    FROM Orders AS o
    INNER JOIN Customer AS c
    ON o.CustomerID = c.Id
    INNER JOIN Shipper AS s
    ON o.ShipVia = s.Id
    GROUP BY CustomerName, ShipperName
    ORDER BY NumberOfOrder DESC
```

Total rows loaded: 273

	CustomerName	ShipperName	NumberOfOrder
1	La maison d'Asie	Speedy Express	85
2	Suprêmes délices	Federal Shipping	85
3	Ana Trujillo Emparedados y helados	Speedy Express	83
4	Berglunds snabbköp	United Package	83
5	Gourmet Lanchonetes	Federal Shipping	82
6	Magazzini Alimentari Riuniti	Federal Shipping	79
7	QUICK-Stop	Federal Shipping	79
8	B's Beverages	Federal Shipping	78
9	Vaffeljernet	United Package	78
10	GROSELLA-Restaurante	Speedy Express	77
11	Lehmanns Marktstand	Federal Shipping	77
12	LINO-Delicateses	Speedy Express	76
13	Save-a-lot Markets	United Package	76
14	Frankenversand	United Package	75
15	Queen Cozinha	United Package	75
16	Furia Bacalhau e Frutos do Mar	Federal Shipping	74
17	LILA-Supermercado	United Package	74
18	Mère Paillarde	United Package	74
19	Wellington Importadora	United Package	74
20	Ernst Handel	United Package	73

3) Create a view showing the total quantity sold and the total revenue (using the formula for equation 1 above) by product category. Sort the result by category name (ascending).

View name: SoldProductCategory

```
SELECT prod.CategoryName, SUM(od.Quantity) AS TotalQuantitySold, SUM(od.Quantity * od.UnitPrice * (1 - od.Discount)) AS TotalRevenue
    FROM OrderDetail AS od
    INNER JOIN
    (SELECT CategoryName, p.Id FROM Product AS p
    INNER JOIN Category AS c
    ON p.CategoryId = c.id) AS prod
    ON od.ProductId = prod.Id
    GROUP BY prod.CategoryName
    ORDER BY prod.CategoryName
```

Total rows loaded: 8

	CategoryName	TotalQuantitySold	TotalRevenue
1	Beverages	2467864	93616392.93
2	Condiments	2470723	56986747.73500009
3	Confections	2679171	67482912.74499984
4	Dairy Products	2064326	59324315.08499998
5	Grains/Cereals	1433573	29075183.5875
6	Meat/Poultry	1237194	66907617.829500206
7	Produce	1032576	33398310.929999873
8	Seafood	2470086	51075542.54749964

4) Create a view of the orders where both the employee and customer contact live in the same city. The result should show order ID, order date, customer contact name, customer city, employee name (first and last), and employee city.

```
View name: OrderSameCity

SELECT o.Id AS OrderId, o.OrderDate, c.ContactName AS CustContactName, c.City AS CustCity, e.FirstName||' '||e.LastName AS EmpName, e.City As EmpCity
    FROM Orders As o
    INNER JOIN Employee AS e
    ON o.EmployeeId = e.Id
    INNER JOIN Customer AS c
    ON o.CustomerId = c.Id
    WHERE e.City = c.City
```

Total rows loaded: 533

	OrderId	OrderDate	CustContactName	CustCity	EmpName	EmpCity
1	10289	2012-08-26	Victoria Ashworth	London	Robert King	London
2	10355	2012-11-15	Thomas Hardy	London	Michael Suyama	London
3	10359	2012-11-21	Hari Kumar	London	Steven Buchanan	London
4	10469	2013-03-10	Karl Jablonski	Seattle	Nancy Davolio	Seattle
5	10523	2013-05-01	Hari Kumar	London	Robert King	London
6	10532	2013-05-09	Ann Devon	London	Robert King	London
7	10538	2013-05-15	Victoria Ashworth	London	Anne Dodsworth	London
8	10539	2013-05-16	Victoria Ashworth	London	Michael Suyama	London
9	10596	2013-07-11	Karl Jablonski	Seattle	Laura Callahan	Seattle
10	10599	2013-07-15	Victoria Ashworth	London	Michael Suyama	London
11	10696	2013-10-08	Karl Jablonski	Seattle	Laura Callahan	Seattle
12	10804	2013-12-30	Hari Kumar	London	Michael Suyama	London
13	10848	2014-01-23	Elizabeth Brown	London	Robert King	London
14	10869	2014-02-04	Hari Kumar	London	Steven Buchanan	London
15	10953	2014-03-16	Thomas Hardy	London	Anne Dodsworth	London
16	11016	2014-04-10	Thomas Hardy	London	Anne Dodsworth	London
17	11047	2014-04-24	Ann Devon	London	Robert King	London
18	11194	2013-05-28 19:18:55	Thomas Hardy	London	Michael Suyama	London
19	11228	2012-10-10 16:25:43	Hari Kumar	London	Steven Buchanan	London
20	11267	2012-12-06 09:34:48	Simon Crowther	London	Anne Dodsworth	London
21	11276	2014-11-20 08:37:05	Ann Devon	London	Anne Dodsworth	London

5) Produce a “product catalog” report consisting of the following columns: Product ID, Product Name, Supplier Name, Category Name, Quantity Per Unit, and Unit Price. Sort the list by Product Name. Only include products that have not been discontinued.

```
View name: ProductCatalog

SELECT p.Id AS ProductID, p.ProductName, s.CompanyName AS SupplierName, c.CategoryName , p.QuantityPerUnit, p.UnitPrice
    FROM Product AS p
    INNER JOIN Supplier AS s
    ON p.SupplierId = s.Id
    INNER JOIN Category AS c
    ON p.CategoryId = c.Id
    WHERE Discontinued = 0
    GROUP BY p.ProductName
    ORDER BY p.ProductName
```

Total rows loaded: 69

	ProductID	ProductName	SupplierName	CategoryName	QuantityPerUnit	UnitPrice
1	3	Aniseed Syrup	Exotic Liquids	Condiments	12 - 550 ml bottles	10
2	40	Boston Crab Meat	New England Seafood Cannery	Seafood	24 - 4 oz tins	18.4
3	60	Camembert Pierrot	Gai pâturage	Dairy Products	15 - 300 g rounds	34
4	18	Carnarvon Tigers	Pavlova,Ltd.	Seafood	16 kg pkg.	62.5
5	1	Chai	Exotic Liquids	Beverages	10 boxes x 20 bags	18
6	2	Chang	Exotic Liquids	Beverages	24 - 12 oz bottles	19
7	39	Chartreuse verte	Aux joyeux ecclésiastiques	Beverages	750 cc per bottle	18
8	4	Chef Anton's Cajun Seasoning	New Orleans Cajun Delights	Condiments	48 - 6 oz jars	22
9	48	Chocolade	Zaanse Snoepfabriek	Confections	10 pkgs.	12.75
10	38	Côte de Blaye	Aux joyeux ecclésiastiques	Beverages	12 - 75 cl bottles	263.5
11	58	Escargots de Bourgogne	Escargots Nouveaux	Seafood	24 pieces	13.25
12	52	Filo Mix	G'day,Mate	Grains/Cereals	16 - 2 kg boxes	7
13	71	Flotemysost	Norske Meierier	Dairy Products	10 - 500 g pkgs.	21.5
14	33	Geitost	Norske Meierier	Dairy Products	500 g	2.5
15	15	Genen Shouyu	Mayumi's	Condiments	24 - 250 ml bottles	15.5
16	56	Gnocchi di nonna Alice	Pasta Buttini s.r.l.	Grains/Cereals	24 - 250 g pkgs.	38
17	31	Gorgonzola Telino	Formaggi Fortini s.r.l.	Dairy Products	12 - 100 g pkgs	12.5
18	6	Grandma's Boysenberry Spread	Grandma Kelly's Homestead	Condiments	12 - 8 oz jars	25
19	37	Gravad lax	Svensk Sjöföda AB	Seafood	12 - 500 g pkgs.	26
20	69	Gudbrandsdalsost	Norske Meierier	Dairy Products	10 kg pkg.	36
21	44	Gula Malacca	Leka Trading	Condiments	20 - 2 kg bags	19.45
22	26	Gumbär Gummibärchen	Heli Süßwaren GmbH & Co.KG	Confections	100 - 250 g bags	31.23

6) Create a list of the total quantities ordered for each product ordered by Bottom-Dollar Markets in the year 2014. Your result should contain Product Name and Quantity and be alphabetically sorted by Product Name.

View name: BottomDollarMarkets

```
SELECT p.ProductName, SUM(od.Quantity) AS TotalQuantity FROM Product AS p
    INNER JOIN OrderDetail AS od
    ON p.Id = od.ProductId
    WHERE od.OrderId IN (
    SELECT o.Id FROM Orders AS o
    INNER JOIN Customer As c
    ON o.CustomerId = c.Id
    WHERE c.CompanyName = 'Bottom-Dollar Markets' AND strftime('%Y', OrderDate) = '2014')
    GROUP BY p.ProductName
    ORDER BY p.ProductName
```

Total rows loaded: 77

	ProductName	TotalQuantity
1	Alice Mutton	488
2	Aniseed Syrup	535
3	Boston Crab Meat	506
4	Camembert Pierrot	515
5	Carnarvon Tigers	405
6	Chai	486
7	Chang	452
8	Chartreuse verte	522
9	Chef Anton's Cajun Seasoning	628
10	Chef Anton's Gumbo Mix	396
11	Chocolade	402
12	Côte de Blaye	407
13	Escargots de Bourgogne	415
14	Filo Mix	374
15	Flotemysost	352
16	Geitost	615
17	Genen Shouyu	692
18	Gnocchi di nonna Alice	694
19	Gorgonzola Telino	414
20	Grandma's Boysenberry Spread	460
21	Gravad lax	503
22	Guaraná Fantástica	579
23	Gudbrandsdalsost	396

7) Create a contact list (containing both customers and suppliers) by country consisting of the following columns: Country, City, Company Name, Contact Name, Phone, and "Relationship" – a column with a value of "Customer" or "Supplier" as applicable. Sort the list by Country and then City.

View name: ContactList

```
SELECT Country, City, CompanyName, ContactName, Phone, 'Customer' AS Relationship
FROM Customer
UNION
SELECT Country, City, CompanyName, ContactName, Phone, 'Supplier' AS Relationship
FROM Supplier
ORDER BY Country, City
```

Total rows loaded: 120

	Country	City	CompanyName	ContactName	Phone	Relationsh
1	Argentina	Buenos Aires	Cactus Comidas para llevar	Patricio Simpson	(1) 135-5555	Customer
2	Argentina	Buenos Aires	Océano Atlántico Ltda.	Yvonne Moncada	(1) 135-5333	Customer
3	Argentina	Buenos Aires	Rancho grande	Sergio Gutiérrez	(1) 123-5555	Customer
4	Australia	Melbourne	Pavlova,Ltd.	Ian Devling	(03) 444-2343	Supplier
5	Australia	Sydney	G'day,Mate	Wendy Mackenzie	(02) 555-5914	Supplier
6	Austria	Graz	Ernst Handel	Roland Mendel	7675-3425	Customer
7	Austria	Salzburg	Piccolo und mehr	Georg Pipps	6562-9722	Customer
8	Belgium	Bruxelles	Maison Dewey	Catherine Dewey	(02) 201 24 67	Customer
9	Belgium	Charleroi	Suprêmes délices	Pascale Cartrain	(071) 23 67 22 20	Customer
10	Brazil	Campinas	Gourmet Lanchonetes	André Fonseca	(11) 555-9482	Customer
11	Brazil	Resende	Wellington Importadora	Paula Parente	(14) 555-8122	Customer
12	Brazil	Rio de Janeiro	Hanari Carnes	Mario Pontes	(21) 555-0091	Customer
13	Brazil	Rio de Janeiro	Que Delícia	Bernardo Batista	(21) 555-4252	Customer
14	Brazil	Rio de Janeiro	Ricardo Adocicados	Janete Limeira	(21) 555-3412	Customer
15	Brazil	Sao Paulo	Comércio Mineiro	Pedro Afonso	(11) 555-7647	Customer
16	Brazil	Sao Paulo	Familia Arquibaldo	Aria Cruz	(11) 555-9857	Customer
17	Brazil	Sao Paulo	Queen Cozinha	Lúcia Carvalho	(11) 555-1189	Customer
18	Brazil	Sao Paulo	Refrescos Americanas LTDA	Carlos Diaz	(11) 555 4640	Supplier
19	Brazil	Sao Paulo	Tradição Hipermercados	Anabela Domingues	(11) 555-2167	Customer
20	Canada	Montréal	Ma Maison	Jean-Guy Lauzon	(514) 555-9022	Supplier
21	Canada	Montréal	Mère Paillarde	Jean Fresnière	(514) 555-8054	Customer

8) For every employee who has direct reports (people reporting to them), produce a list of the total revenue of their direct reports. The report should contain two columns: Manager ID and Total Revenue.

View name: DirectReportRevenue

```
SELECT e.ReportsTo AS ManagerId , SUM(od.Quantity * od.UnitPrice * (1 - od.Discount)) AS TotalRevenue
    FROM Employee AS e
    INNER JOIN Orders AS o
    ON e.Id = o.EmployeeId
    INNER JOIN OrderDetail AS od
    ON o.Id = od.OrderId
    WHERE ManagerId IS NOT NULL
    GROUP BY ManagerId
```

Total rows loaded: 2

	ManagerId	TotalRevenue
1	2	255902398.53350094
2	5	152850060.49099952

9) Produce a list of the five most expensive products currently in the catalog and active (discontinued = 0). Sort by decreasing unit price (most expensive first).

Internatio View name: ExpProd

```
1 SELECT ProductName, UnitPrice FROM Product AS p
2     WHERE Discontinued = 0
3     ORDER BY UnitPrice DESC
4     LIMIT 5
```

Total rows loaded: 5

	ProductName	UnitPrice
1	Côte de Blaye	263.5
2	Sir Rodney's Marmalade	81
3	Carnarvon Tigers	62.5
4	Raclette Courdavault	55
5	Manjimup Dried Apples	53

10) Produce a list of the total revenue for each supplier that was generated by each employee. Display the employee name, supplier name, and total revenue (using the formula for revenue from question 1).

Internatio View name: RevSuppEmp

```
1  SELECT e.FirstName||' '||e.LastName AS EmpName, s.CompanyName AS SuppName, SUM(od.Quantity * od.UnitPrice * (1 - od.Discount)) AS TotalRevenue
2      FROM Employee AS e
3      INNER JOIN Orders AS o
4      ON e.Id = o.EmployeeId
5      INNER JOIN OrderDetail AS od
6      ON o.Id = od.OrderId
7      INNER JOIN Product AS p
8      ON od.ProductID = p.Id
9      INNER JOIN Supplier AS s
10     ON p.SupplierId = s.Id
11     GROUP BY EmpName, SuppName
```

Total rows loaded: 261

	EmpName	SuppName	TotalRevenue
1	Andrew Fuller	Aux joyeux ecclésiastiques	6224405.1
2	Andrew Fuller	Bigfoot Breweries	997979
3	Andrew Fuller	Cooperativa de Quesos 'Las Cabras'	1297405
4	Andrew Fuller	Escargots Nouveaux	291144.9
5	Andrew Fuller	Exotic Liquids	1053268.25
6	Andrew Fuller	Formaggi Fortini s.r.l.	1705614.6999999997
7	Andrew Fuller	Forêts d'érables	1714001.6500000008
8	Andrew Fuller	G'day,Mate	2067599.6000000008
9	Andrew Fuller	Gai pâturage	1990432.2
10	Andrew Fuller	Grandma Kelly's Homestead	2115095
11	Andrew Fuller	Heli Süßwaren GmbH & Co.KG	2022823.3800000018
12	Andrew Fuller	Karkki Oy	1164019.25
13	Andrew Fuller	Leka Trading	1725048.360000001
14	Andrew Fuller	Lyngbysild	468656.7
15	Andrew Fuller	Ma Maison	683770.5300000003
16	Andrew Fuller	Mayumi's	992824.85
17	Andrew Fuller	New England Seafood Cannery	611138.9200000006
18	Andrew Fuller	New Orleans Cajun Delights	1778652.769999999
19	Andrew Fuller	Nord-Ost-Fisch Handelsgesellschaft mbH	568036.62
20	Andrew Fuller	Norske Meierier	1332076.15
21	Andrew Fuller	PB Knäckebröd AB	654298.2