1. List of all customers

SELECT \* FROM Sales.Customer;

2. list of all customers where company name ending in N

SELECT \* FROM Sales.Customer WHERE CompanyName LIKE '%N';

3. list of all customers who live in Berlin or London

SELECT \* FROM Sales.Customer

WHERE City IN ('Berlin', 'London');

4. ist of all customers who live in UK or USA

SELECT \* FROM Sales.Customer

WHERE CountryRegionCode IN ('UK', 'USA');

5. list of all products sorted by product name

SELECT \* FROM Production.Product

ORDER BY Name;

6. list of all products where product name starts with an A

SELECT \* FROM Production.Product

WHERE Name LIKE 'A%';

7. List of customers who ever placed an order

SELECT DISTINCT c.CustomerID, c.\*

FROM Sales.Customer c

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID;

B. list of Customers who live in London and have bought chai 9. List of customers who never place an order

SELECT DISTINCT c.CustomerID, c.\*

FROM Sales.Customer c

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

JOIN Production.Product p ON sod.ProductID = p.ProductID

WHERE c.City = 'London' AND p.Name = 'Chai';

9. List of customers who never placed an order:

SELECT \* FROM Sales.Customer c

WHERE NOT EXISTS (

SELECT 1 FROM Sales.SalesOrderHeader soh

WHERE soh.CustomerID = c.CustomerID

);

10. List of customers who ordered Tofu

SELECT DISTINCT c.CustomerID, c.\*

FROM Sales.Customer c

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

JOIN Production.Product p ON sod.ProductID = p.ProductID

WHERE p.Name = 'Tofu';

11. Detalls of first order of the system

SELECT TOP 1 \* FROM Sales.SalesOrderHeader

ORDER BY OrderDate;

12. Find the details of most expensive order date

SELECT TOP 1 OrderDate, SUM(UnitPrice \* OrderQty) AS TotalAmount

FROM Sales.SalesOrderDetail sod

JOIN Sales.SalesOrderHeader soh ON sod.SalesOrderID = soh.SalesOrderID

GROUP BY OrderDate

ORDER BY TotalAmount DESC;

13. For each order get the OrderID and Average quantity of items in that order

SELECT SalesOrderID, AVG(OrderQty) AS AvgQuantity

FROM Sales.SalesOrderDetail

GROUP BY SalesOrderID;

14. For each order get the arder, minimum quantity and maximum quantity for that order

SELECT SalesOrderID, MIN(OrderQty) AS MinQuantity, MAX(OrderQty) AS MaxQuantity

FROM Sales.SalesOrderDetail

GROUP BY SalesOrderID;

15. Get a list of all managers and total number of employees who repart to them

SELECT ManagerID, COUNT(EmployeeID) AS NumberOfReportees

FROM HumanResources.Employee

GROUP BY ManagerID;

16. Get the OrderID and the total quantity for each order that has a total quantity of greater than 300

SELECT SalesOrderID, SUM(OrderQty) AS TotalQuantity

FROM Sales.SalesOrderDetail

GROUP BY SalesOrderID

HAVING SUM(OrderQty) > 300;

17. list of all orders placed on or after 1996/12/31

SELECT \* FROM Sales.SalesOrderHeader

WHERE OrderDate >= '1996-12-31';

18. list of all orders shipped to Canada 19. list of all orders with order total > 200

SELECT \* FROM Sales.SalesOrderHeader

WHERE ShipCountryRegionCode = 'CA';

19. List of all orders with order total > 200:

SELECT soh.SalesOrderID, SUM(sod.UnitPrice \* sod.OrderQty) AS OrderTotal

FROM Sales.SalesOrderHeader soh

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY soh.SalesOrderID

HAVING SUM(sod.UnitPrice \* sod.OrderQty) > 200;

20. List of countries and sales made in each country

SELECT ShipCountryRegionCode, SUM(UnitPrice \* OrderQty) AS TotalSales

FROM Sales.SalesOrderDetail sod

JOIN Sales.SalesOrderHeader soh ON sod.SalesOrderID = soh.SalesOrderID

GROUP BY ShipCountryRegionCode;

21. List of Customer ContactName and number of orders they placed

SELECT c.CustomerID, COUNT(soh.SalesOrderID) AS NumberOfOrders

FROM Sales.Customer c

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID

GROUP BY c.CustomerID;

22. List of customer contactnames who have placed more than 3 orders

SELECT c.CustomerID, p.FirstName, p.LastName, COUNT(soh.SalesOrderID) AS NumberOfOrders

FROM Sales.Customer c

JOIN Person.Person p ON c.PersonID = p.PersonID

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID

GROUP BY c.CustomerID, p.FirstName, p.LastName

HAVING COUNT(soh.SalesOrderID) > 3;

23. List of discontinued products which were ordered between 1/1/1997 and 1/1/1998

SELECT DISTINCT p.ProductID, p.Name

FROM Production.Product p

JOIN Sales.SalesOrderDetail sod ON p.ProductID = sod.ProductID

JOIN Sales.SalesOrderHeader soh ON sod.SalesOrderID = soh.SalesOrderID

WHERE p.DiscontinuedDate IS NOT NULL

AND soh.OrderDate BETWEEN '1997-01-01' AND '1998-01-01';

24. List of employee firsname, lastName, superviser FirstName, LastName

SELECT e.EmployeeID, e.FirstName, e.LastName, m.FirstName AS SupervisorFirstName, m.LastName AS SupervisorLastName

FROM HumanResources.Employee e

LEFT JOIN HumanResources.Employee m ON e.ManagerID = m.EmployeeID;

25. List of Employees id and total sale condcuted by employer

SELECT e.EmployeeID, SUM(sod.UnitPrice \* sod.OrderQty) AS TotalSales

FROM HumanResources.Employee e

JOIN Sales.SalesOrderHeader soh ON e.BusinessEntityID = soh.SalesPersonID

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY e.EmployeeID;

26. Ist of employees whose First Name contains character a

SELECT \* FROM HumanResources.Employee

WHERE FirstName LIKE '%a%';

27. List of managers who have more than four people reporting to them.

SELECT e.ManagerID, COUNT(e.EmployeeID) AS NumberOfReportees

FROM HumanResources.Employee e

GROUP BY e.ManagerID

HAVING COUNT(e.EmployeeID) > 4;

28. List of Orders and ProductNames

SELECT soh.SalesOrderID, p.Name AS ProductName

FROM Sales.SalesOrderHeader soh

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

JOIN Production.Product p ON sod.ProductID = p.ProductID;

29. List of orders place by the best customer

WITH CustomerTotalSales AS (

SELECT c.CustomerID, SUM(sod.UnitPrice \* sod.OrderQty) AS TotalSales

FROM Sales.Customer c

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY c.CustomerID

)

SELECT soh.\*

FROM Sales.SalesOrderHeader soh

JOIN CustomerTotalSales cts ON soh.CustomerID = cts.CustomerID

WHERE cts.TotalSales = (SELECT MAX(TotalSales) FROM CustomerTotalSales);

30. List of anders placed by customers who do not have a Fax number

SELECT soh.\*

FROM Sales.SalesOrderHeader soh

JOIN Sales.Customer c ON soh.CustomerID = c.CustomerID

WHERE c.Fax IS NULL;

31. List of Postal codes where the product Tofu was shipped 32. List of product Names that were shipped to France

SELECT DISTINCT soh.ShipPostalCode

FROM Sales.SalesOrderHeader soh

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

JOIN Production.Product p ON sod.ProductID = p.ProductID

WHERE p.Name = 'Tofu';

32. List of product names that were shipped to France:

SELECT DISTINCT p.Name

FROM Production.Product p

JOIN Sales.SalesOrderDetail sod ON p.ProductID = sod.ProductID

JOIN Sales.SalesOrderHeader soh ON sod.SalesOrderID = soh.SalesOrderID

WHERE soh.ShipCountryRegionCode = 'FR';

33. List of Product Names and Categories for the supplier Specialty Biscuits, Ltd.

SELECT p.Name AS ProductName, pc.Name AS CategoryName

FROM Production.Product p

JOIN Production.ProductCategory pc ON p.ProductCategoryID = pc.ProductCategoryID

JOIN Purchasing.ProductVendor pv ON p.ProductID = pv.ProductID

JOIN Purchasing.Vendor v ON pv.VendorID = v.VendorID

WHERE v.Name = 'Specialty Biscuits, Ltd.';

34. List of products that were never ordered

SELECT p.\*

FROM Production.Product p

LEFT JOIN Sales.SalesOrderDetail sod ON p.ProductID = sod.ProductID

WHERE sod.ProductID IS NULL;

35. List of products where units in stock is less than 10 and units on order are O

SELECT p.\*

FROM Production.Product p

WHERE p.UnitsInStock < 10 AND p.UnitsOnOrder = 0;

36. List of top 10 countries by sales

SELECT TOP 10 ShipCountryRegionCode, SUM(sod.UnitPrice \* sod.OrderQty) AS TotalSales

FROM Sales.SalesOrderHeader soh

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY ShipCountryRegionCode

ORDER BY TotalSales DESC;

37. Number of orders each employee has taken for customers with CustomerIDs between A and AO

SELECT e.EmployeeID, COUNT(soh.SalesOrderID) AS NumberOfOrders

FROM HumanResources.Employee e

JOIN Sales.SalesOrderHeader soh ON e.BusinessEntityID = soh.SalesPersonID

JOIN Sales.Customer c ON soh.CustomerID = c.CustomerID

WHERE c.CustomerID BETWEEN 'A' AND 'AO'

GROUP BY e.EmployeeID;

38. Ordendate of most expensive order

SELECT TOP 1 soh.OrderDate, SUM(sod.UnitPrice \* sod.OrderQty) AS TotalAmount

FROM Sales.SalesOrderHeader soh

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY soh.OrderDate

ORDER BY TotalAmount DESC;

39. Product name and total revenue from that product

SELECT TOP 1 soh.OrderDate, SUM(sod.UnitPrice \* sod.OrderQty) AS TotalAmount

FROM Sales.SalesOrderHeader soh

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY soh.OrderDate

ORDER BY TotalAmount DESC;

40. Supplierid and number of products offered

SELECT pv.VendorID, COUNT(pv.ProductID) AS NumberOfProducts

FROM Purchasing.ProductVendor pv

GROUP BY pv.VendorID;

41. Top ten customers based on their business

SELECT TOP 10 c.CustomerID, SUM(sod.UnitPrice \* sod.OrderQty) AS TotalSales

FROM Sales.Customer c

JOIN Sales.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID

JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID

GROUP BY c.CustomerID

ORDER BY TotalSales DESC;

42. What is the total revenue of the company

SELECT SUM(sod.UnitPrice \* sod.OrderQty) AS TotalRevenue

FROM Sales.SalesOrderDetail sod;