<u>Answers to 50 NorthWind Database Practice Queries using MySQL</u>

NB: Please note that the default order for sorting queries/column in SQL is **ASC** when using the **ORDER BY** clause.

CREATE DATABASE IF NOT EXISTS northwind;

USE northwind;

1. SELECT CategoryName, Description
    FROM northwind.categories
    ORDER BY CategoryName;

2. SELECT ContactName, CompanyName, ContactTitle, Phone
    From northwind.customers
    ORDER BY Phone;

3. SELECT UPPER(FirstName) AS FirstName, UPPER(LastName) AS LastName, HireDate
    FROM northwind.employees
    ORDER BY HireDate;

4. SELECT OrderID, OrderDate, ShippedDate, CustomerID, Freight
    FROM northwind.orders
    ORDER BY Freight Desc
    LIMIT 10;

5. SELECT lower(CustomerID) AS ID
    FROM northwind.customers;

6. SELECT CompanyName, Fax, Phone,Country, HomePage
    FROM northwind.suppliers
    ORDER BY Country DESC, CompanyName ;
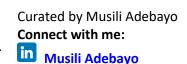
7. SELECT CompanyName,ContactName
    FROM northwind.customers
    WHERE City = 'Buenos Aires';

8. SELECT "ProductName", "UnitPrice", QuantityPerUnit"
    FROM "Products"
    WHERE "UnitsInStock" = 0

9. SELECT ContactName, Address, City
    FROM northwind.customers
    WHERE Country NOT IN ("Germany","Mexico", "Spain");

10. SELECT OrderDate, ShippedDate, CustomerID, Freight
    FROM northwind.orders
    WHERE OrderDate = '1996-05-21 ';

11. SELECT FirstName,LastName,Country
    FROM northwind.employees
    WHERE Country <> 'USA';

12. SELECT EmployeeID,OrderID,CustomerID,RequiredDate,ShippedDate
    FROM northwind.orders
    WHERE ShippedDate > RequiredDate;

13. SELECT City,CompanyName,ContactName
    FROM northwind.customers
    WHERE City LIKE "A%" OR City LIKE "B%";

14. SELECT OrderID
    FROM northwind.orders
    WHERE mod(OrderID,2)=0;

15. SELECT *
    FROM northwind.orders
    WHERE Freight > 500;

16. SELECT ProductName, UnitsInStock,UnitsOnOrder,ReorderLevel
    FROM northwind.products
    WHERE ReorderLevel = 0;

17. SELECT CompanyName,ContactName,Fax
    FROM northwind.customers
    WHERE Fax IS NULL;

18. SELECT FirstName, LastName
    FROM northwind.employees
    WHERE ReportsTo IS NULL;

19. SELECT OrderID
    FROM northwind.orders
    WHERE mod(OrderID,2)=1;

20. SELECT CompanyName,ContactName,Fax
    FROM northwind.customers
    WHERE Fax IS NULL
    ORDER BY ContactName;

21. SELECT City,CompanyName,ContactName,city
    FROM northwind.customers
    WHERE City LIKE "%L%"
    ORDER BY ContactName;

22. SELECT FirstName, LastName,BirthDate
    FROM northwind.employees
    where BirthDate >= '1950-01-01'
    AND BirthDate < '1960-01-01';

    OR

```sql
    SELECT FirstName, LastName,BirthDate
    FROM northwind.employees
    where BirthDate Between '1950-01-01'
    AND '1959-12-31';
```

23.
```sql
    SELECT LastName, FirstName, extract(year from Birthdate) AS BirthYear
    FROM northwind.employees;
```

24.
```sql
    SELECT OrderID, count(OrderID) as NumberofOrders
    FROM northwind.`order details`
    GROUP BY OrderID
    ORDER BY NumberofOrders DESC ;
```

25.
```sql
    SELECT  s.SupplierID, p.ProductName, S.CompanyName
    FROM northwind.suppliers s
    JOIN northwind.products p
    ON s.SupplierID = p.SupplierID
    WHERE s.CompanyName IN ('Exotic Liquids','Specialty Biscuits, Ltd.','Escargots Nouveaux')
    ORDER BY s.SupplierID;
```

26.
```sql
    SELECT ShipPostalCode, OrderID, OrderDate, RequiredDate, ShippedDate,ShipAddress
    FROM northwind.orders
    WHERE ShipPostalCode = '98124';
```

27.
```sql
    SELECT ContactName, ContactTitle, CompanyName
    FROM northwind.customers
    WHERE ContactTitle NOT LIKE "%Sales%";
```

28.
```sql
    SELECT LastName, FirstName, City
    FROM northwind.employees
    WHERE City != "Seattle";
```

29.
```sql
    SELECT CompanyName, ContactTitle, City, Country
    FROM northwind.customers
    WHERE Country IN ("Mexico","Spain")
    AND City <> "Madrid";
```

30.
```sql
    SELECT CONCAT( FirstName,' ', LastName ,' can be reached at ', 'x',Extension ) AS Contactinfo
    FROM northwind.employees;
```

31.
```sql
    SELECT ContactName
    FROM northwind.customers
    where ContactName NOT like "_A%";
```

32.
```sql
    SELECT round (avg (UnitPrice),0) AS AveragePrice,
    SUM(UnitsInStock) AS TotalStock,
    max(UnitsOnOrder) as MaxOrder
    FROM northwind.products;
```

33. SELECT s.SupplierID, s.CompanyName, c.CategoryName, p.ProductName, p.UnitPrice
    FROM northwind.products p
    JOIN northwind.suppliers s
    ON s.SupplierID = p.SupplierID
    JOIN northwind.categories C
    On c.CategoryID = p.CategoryID;

34. SELECT CustomerID, sum(Freight)
    FROM northwind.orders
    GROUP BY CustomerID
    HAVING sum(Freight) > "200";

35. SELECT od.OrderID, c.ContactName,od.UnitPrice,od.Quantity,od.Discount
    FROM northwind.`order details` od
    JOIN northwind.orders o
    ON od.OrderID = o.OrderID
    JOIN northwind.customers c
    ON c.CustomerID = o.CustomerID
    WHERE od.Discount != '0';

36. SELECT a.EmployeeID,
    CONCAT (a.LastName, " " ,a.FirstName)as employee,
    CONCAT (b.LastName," " , b.FirstName) as manager
    FROM northwind.employees a
    LEFT JOIN northwind.employees b
    ON b.EmployeeID = a.ReportsTo
    ORDER BY a.EmployeeID;

37. SELECT avg(UnitPrice) AS AveragePrice,
    min(UnitPrice)AS MinimumPrice,
    max(UnitPrice)AS MaximumPrice
    from northwind.products;

38. CREATE VIEW CustomerInfo AS
    SELECT c.CustomerID, c.CompanyName, c.ContactName, c.ContactTitle, c.Address,
    c.City,c.Country,c.Phone,o.OrderDate, o.RequiredDate, o.ShippedDate
    FROM
    northwind.customers c
    JOIN
    northwind.orders o
    ON c.CustomerID = o.CustomerID;

39. RENAME TABLE customerinfo TO CustomerDetails;

40. CREATE VIEW ProductDetails AS
    SELECT
    p.ProductID,S.CompanyName,
    p.ProductName,c.CategoryName, c.Description,
    p.QuantityPerUnit, p.UnitPrice, p.UnitsInStock, p.UnitsOnOrder,
    p.ReorderLevel, p.Discontinued
    FROM northwind.suppliers s
    JOIN northwind.products p ON s.SupplierID = p.SupplierID
    JOIN northwind.categories c
    ON c.CategoryID = p.CategoryID;

41. DROP VIEW IF EXISTS customerdetails;

42. SELECT substring(CategoryName,1,5) as Short_info
    FROM northwind.categories;

43. DROP table IF exists shippers_dup;
    CREATE TABLE shippers_dup (LIKE northwind.shippers);
    INSERT INTO shippers_dup SELECT * FROM northwind.shippers;

44. ALTER TABLE shippers_dup
    ADD column Email VARCHAR(50);

    UPDATE northwind.shippers_dup
    SET Email ='speedyexpress@gmail.com'
    WHERE ShipperID = '1';

    UPDATE northwind.shippers_dup
    SET Email ='unitedpackage@gmail.com'
    WHERE ShipperID = '2';

    UPDATE northwind.shippers_dup
    SET Email ='federalshipping@gmail.com'
    WHERE ShipperID = '3';

45. SELECT s.CompanyName,p.ProductName
    FROM northwind.categories c
    JOIN northwind.products p
    ON c.CategoryID = p.CategoryID
    JOIN northwind.suppliers s
    ON s.SupplierID = p.SupplierID
    WHERE CategoryName = "Seafood";

46. SELECT c.CategoryID, s.CompanyName, p.ProductName
    FROM northwind.categories c
    JOIN northwind.products p
    ON c.CategoryID = p.CategoryID
    JOIN northwind.suppliers s
    ON s.SupplierID = p.SupplierID
    WHERE c.CategoryID = "5";

47. DROP table IF exists shippers_dup;

48. SELECT LastName, FirstName, Title,DATE_FORMAT(FROM_DAYS(DATEDIFF(CURRENT_DATE, BirthDate)),"%y Years ")
    AS Age from northwind.employees;

49. SELECT c.CompanyName, count(c.CustomerID) AS NumberofOrders
    FROM northwind.customers c
    JOIN northwind.orders o
    ON o.CustomerID = c.CustomerID
    WHERE o.OrderDate >= '1994-12-31'
    GROUP BY c.CustomerID
    having count(c.CustomerID) > 10;

50. SELECT CONCAT(ProductName,' ', "weighs/is" ," ", QuantityPerUnit, " ", "and cost ","$",ROUND(UnitPrice)) AS
    ProductInfo
    FROM northwind.products;