**……………DAY10………………….**

**Practice Queries of Northwind Database**

1. **Create a report that shows the Category Name and Description from the categories table sorted by Category Name**.

SELECT Category Name, Description

FROM north wind. categories

ORDER BY Category Name;

1. **Create a report that shows the Contact Name, CompanyName, Contact Title and Phone number from the customers table sorted by Phone.**

SELECT ContactName, CompanyName, ContactTitle, Phone

From north wind. customers

ORDER BY Phone;

1. **Create a report that shows the capitalized FirstName and capitalized Last Name renamed as FirstName and Last name respectively and Hire Date from the employees table sorted from the newest to the oldest employee.**

SELECT UPPER(FirstName) AS FirstName, UPPER(Last Name) AS Last Name, Hire Date

FROM northwind.employees

ORDER BY Hire Date;

1. **Create a report that shows the top 10 OrderID, OrderDate, ShippedDate, CustomerID, Freight from the orders table sorted by Freight in descending order.**

SELECT OrderID, OrderDate, ShippedDate, CustomerID, Freight

FROM northwind.orders

ORDER BY Freight Desc

LIMIT 10;

1. **Create a report that shows all the CustomerID in lowercase letter and renamed as ID from the customers table.**

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

1. **Create a report that shows the CompanyName, Fax, Phone, Country, HomePage from the suppliers table sorted by the Country in descending order then by CompanyName in ascending order.**

SELECT CompanyName, Fax, Phone,Country, HomePage

FROM northwind.suppliers

ORDER BY Country DESC, CompanyName ;

1. **Create a report that shows CompanyName, ContactName of all customers from ‘Buenos Aires' only.**

SELECT CompanyName,ContactName

FROM northwind.customers

WHERE City = 'Buenos Aires';

1. **Create a report showing ProductName, UnitPrice, QuantityPerUnit of products that are out of stock.**

SELECT ProductName, UnitPrice, QuantityPerUnit

FROM northwind.products

WHERE Discontinued = 1;

1. **Create a report showing all the ContactName, Address, City of all customers not from Germany, Mexico, Spain.**

SELECT ContactName, Address, City

FROM northwind.customers

WHERE Country NOT IN ("Germany","Mexico", "Spain");

1. **Create a report showing OrderDate, ShippedDate, CustomerID, Freight of all orders placed on 21 May 1996.**

SELECT OrderDate, ShippedDate, CustomerID, Freight

FROM northwind.orders

WHERE OrderDate = '1996-05-21 ';

1. . **Create a report showing FirstName, LastName, Country from the employees not from United States.**

SELECT FirstName,LastName,Country

FROM northwind.employees

WHERE Country <> 'USA';

1. **Create a report that showsthe EmployeeID, OrderID, CustomerID, RequiredDate, ShippedDate from all orders shipped later than the required date.**

SELECT EmployeeID,OrderID,CustomerID,RequiredDate,ShippedDate

FROM northwind.orders

WHERE ShippedDate > RequiredDate;

1. **Create a report that shows the City, CompanyName, ContactName of customers from cities starting with A or B.**

SELECT City,CompanyName,ContactName FROM northwind.customers

WHERE City LIKE "A%" OR City LIKE "B%";

1. **Create a report showing all the even numbers of OrderID from the orders table.**

SELECT OrderID

FROM northwind.orders

WHERE mod(OrderID,2)=0;

1. **Create a report that shows all the orders where the freight cost more than $500.**

SELECT \*

FROM northwind.orders

WHERE Freight > 500;

1. **Create a report that shows the ProductName, UnitsInStock, UnitsOnOrder, ReorderLevel of all products that are up for reorder.**

SELECT ProductName, UnitsInStock,UnitsOnOrder,ReorderLevel

FROM northwind.products

WHERE ReorderLevel = 0;

1. **Create a report that shows the CompanyName, ContactName number of all customer that have no fax number**..

SELECT CompanyName,ContactName,Fax

FROM northwind.customers

WHERE Fax IS NOT NULL;

1. **Create a report that shows the FirstName, LastName of all employees that do not report to anybody.**

SELECT FirstName, LastName FROM northwind.employees

WHERE ReportsTo IS NULL;

1. **Create a report showing all the odd numbers of OrderID from the orders table.**

SELECT OrderID

FROM northwind.orders

WHERE mod(OrderID,2)=1;

1. **Create a report that shows the CompanyName, ContactName, Fax of all customersthat do not have Fax number and sorted by ContactName.**

SELECT CompanyName,ContactName,Fax

FROM northwind.customers

WHERE Fax IS NOT NULL

ORDER BY ContactName;

1. **Create a report that shows the City, CompanyName, ContactName of customers from cities that has letter L in the name sorted by ContactName.**

SELECT City,CompanyName,ContactName,city

FROM northwind.customers

WHERE City LIKE "%L%"

ORDER BY ContactName;

1. **Create a report that shows the FirstName, LastName, BirthDate of employees born in the 1950s**.

SELECT FirstName, LastName,BirthDate FROM northwind.employees where BirthDate >= '1950-01-01'

AND BirthDate < '1960-01-01';

**OR**

SELECT FirstName, LastName,BirthDate FROM northwind.employees where BirthDate Between '1950-01-01'

AND '1959-12-31';

1. . **Create a report that shows the FirstName, LastName, the year of Birthdate as birth year from the employees table**.

SELECT LastName, FirstName, extract(year from Birthdate) AS BirthYear

FROM northwind.employees;

1. **Create a report showing OrderID, total number of Order ID as NumberofOrders from the orderdetails table grouped by OrderID and sorted by NumberofOrders in descending order. HINT: you will need to use a Groupby statement.**

SELECT OrderID, count(OrderID) as NumberofOrders

FROM northwind.`order details`

GROUP BY OrderID

ORDER BY NumberofOrders DESC ;

1. **Create a report that shows the SupplierID, ProductName, CompanyName from all product Supplied by Exotic Liquids, Specialty Biscuits, Ltd., Escargots Nouveaux sorted by the supplier ID.**

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;

1. **Create a report that shows the ShipPostalCode, OrderID, OrderDate, RequiredDate, ShippedDate, ShipAddress of all orders with ShipPostalCode beginning with "98124".**

SELECT ShipPostalCode, OrderID, OrderDate, RequiredDate, ShippedDate,ShipAddress

FROM northwind.orders

WHERE ShipPostalCode = '98124';

1. **Create a report that shows the ContactName, ContactTitle, CompanyName of customers that the has no "Sales" in their ContactTitle.**

SELECT ContactName, ContactTitle, CompanyName

FROM northwind.customers

WHERE ContactTitle NOT LIKE "%Sales%";

1. **Create a report that shows the LastName, FirstName, City of employees in cities other "Seattle";**

SELECT LastName, FirstName, City

FROM northwind.employees

WHERE City != "Seattle";

1. **Create a report that shows the CompanyName, ContactTitle, City, Country of all customers in any city in Mexico or other cities in Spain other than Madrid.**

SELECT CompanyName, ContactTitle, City, Country

FROM northwind.customers

WHERE Country IN ("Mexico","Spain")

AND City <> "Madrid";

1. . **Create a select statement that outputs the following**

SELECT CONCAT( FirstName,' ', LastName ,' can be reached at ', 'x',Extension ) AS Contactinfo

FROM northwind.employees;

1. **Create a report that shows the ContactName of all customers that do not have letter A as the second alphabet in their Contactname**.

SELECT ContactName FROM northwind.customers where ContactName NOT like "\_A%";

1. **Create a report that shows the average UnitPrice rounded to the next whole number, total price of UnitsInStock and maximum number of orders from the products table. All saved as AveragePrice, TotalStock and MaxOrder respectively.**

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

1. **Create a report that shows the SupplierID, CompanyName, CategoryName, ProductName and UnitPrice from the products, suppliers and categories table.**

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;

1. **Create a report that showsthe CustomerID,sum of Freight, from the orderstable with sum of freight greater $200, grouped by CustomerID. HINT: you will need to use a Groupby and a Having statement.**

SELECT CustomerID, sum(Freight)

FROM northwind.orders

GROUP BY CustomerID

HAVING sum(Freight) > "200";

1. **Create a report that shows the OrderID ContactName, UnitPrice, Quantity, Discount from the order details, orders and customers table with discount given on every purchase.**

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';

1. **Create a report that showsthe EmployeeID, the LastName and FirstName as employee, and the LastName and FirstName of who they report to as manager from the employees table sorted by Employee ID. HINT: This is a Self-Join.**

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;

1. **Create a report that shows the average, minimum and maximum UnitPrice of all products as AveragePrice, MinimumPrice and MaximumPrice respectively.**

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

1. **Create a report that fetch the first 5 character of categoryName from the category tables and renamed as ShortInfo.**

CREATE VIEW Customer Info 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;

1. . **Create a copy of the shipper table as shippers\_duplicate. Then insert a copy ofshippers data into the new table HINT: Create a Table, use the LIKE Statement and INSERT INTO statement.**

RENAME TABLE customerinfo TO CustomerDetails;

1. **Create a select statement that outputs the following from the shippers\_duplicate Table:**

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;

1. **. Create a report that shows the CompanyName and ProductName from all product in the Seafood category.**

DROP VIEW IF EXISTS customer details;

1. **Create a report that shows the Category ID, CompanyName and ProductName from all product in the category ID 5.**

SELECT substring(CategoryName,1,5) as Short\_info

FROM northwind.categories;

1. **Delete the shippers\_duplicate table.**

DROP table IF exists shippers\_dup;

CREATE TABLE shippers\_dup (LIKE northwind.shippers);

INSERT INTO shippers\_dup SELECT \* FROM northwind.shippers;

1. **Create a select statement that ouputs the following from the employees table. NB: The age might differ depending on the year you are attempting this query**.

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';

1. **Create a report that the CompanyName and total number of orders by customer renamed as number of orders since Decemeber 31, 1994.**

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";

1. **Create a select statement that ouputs the following from the product table NB: It should return 77rows.**

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";