

The SELECT Statement

Assignments

Create the tables and populate the sample records in your schema using script in below Northwin_Schema_Creation.zip. Below assignments are based on tables in Northwind Schema design.



NorthwindSchema.docx



Northwin_Schema_Creation.zip

1. Select CategoryName and Description from the Categories table sorted by CategoryName.
→
`SELECT CategoryName,Description FROM Categories ORDER BY CategoryName;`
2. Create a report showing employees' first and last names and hire dates sorted from newest to oldest employee.
→
`SELECT FirstName, LastName, Hiredate FROM Employees ORDER BY Hiredate desc;`
3. Create a report showing orders sorted by Freight from most expensive to cheapest. Show OrderID, OrderDate, ShippedDate, CustomerID, and Freight.
→
`SELECT OrderID, OrderDate, ShippedDate, CustomerID, Freight FROM Orders ORDER BY Freight DESC;`
4. Select CompanyName, Fax, Phone, HomePage and Country from the Suppliers table sorted by Country in descending order and then by CompanyName in ascending order.
→ `SELECT CompanyName, Fax, Phone, HomePage ,Country from Suppliers ORDER BY Country DESC, CompanyName ASC;`
5. Create a report showing the title and the first and last name of all sales representatives.
→`SELECT title, firstname, lastname from Employees where title='Sales Representative'`

6. Create a report showing all the company names and contact names of customers in Buenos Aires.
→`SELECT companyname, contactname FROM customers where city= "Buenos Aires";`
 7. Create a report showing the product name, unit price and quantity per unit of all products that are out of stock.
→`SELECT productname, unitprice, quantityperunit from products where UNITSINSTOCK=0;`
 8. Create a report showing the order date, shipped date, customer id, and freight of all orders placed on May 19, 1997.
→`SELECT orderdate, shippeddate, customerid, freight from orders where orderdate= TO_DATE('May 19,1997','mon dd,yyyy');`
 9. Create a report showing the first name, last name, and country of all employees not in the United States.
→ `SELECT firstname, lastname, country FROM EMPLOYEES WHERE country <> 'United States'`
 10. Create a report showing the title of courtesy and the first and last name of all employees whose title of courtesy is "Mrs." or "Ms.". Display the full name of the employee.
→ `SELECT TITLEOFCOURTESY ,firstname|| ' ' || lastname as "Full Name" FROM EMPLOYEES where TITLEOFCOURTESY IN('Mrs.','Ms.')`
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Functions

Assignments

Below assignments are based on tables in Northwind schema

1. Find the Total Number of Units Ordered of Product ID 3.
→
`Select count(Units) from order_details where productid=3;`
2. Find the Earliest and Latest Dates of Hire.
→
`Select min(hiredate) as Earliest ,max(hiredate) as Latest from employees;`

3. Retrieve the number of employees in each city.
→
`select count(employeeid),city from employees GROUP BY city;`
4. Find the number of sales representatives in each city that contains at least 2 sales representatives. Order by the number of employees.
→
`SELECT city,count(employeeid) from employees where title='Sales Representatives'
GROUP BY city HAVING count(employeeid)>=2)
ORDER BY count(employeeid)>=2);`
5. Write a query to display Employee name, birth date, hire date, city and country of every Employee hired in 2011. Display birth date of every employee in the format '2nd August 2016'.
→
`SELECT firstname || ' ' || lastname as employeename, to_char(birthdate,'Ddth mon
YYYY') as birthdate, hiredate, city, country from employees WHERE hiredate like
'%2011'`
6. Create a report that shows the total number of orders by Customer since December 31, 1996. The report should only return rows for which the NumOrders is greater than 15.
→
`Select customerid, count(order_id) from orders where orderdate>=('December
31,1996','month dd,yyyy') GROUP BY customerid HAVING count(order_id)>15;`
7. Create a report that shows the total quantity of products (from the Order_Details table) ordered. Only show records for products for which the quantity ordered is fewer than 200.
→
`Select productid,count(productid) from order_details GROUP BY productid HAVING
count(productid)<200`
8. Display employee id, employee name, birthdate, city for all the employees. Display employee name as combination of TitleOfCourtesy and Firstname
→
`SELECT employeeid, titleofcourtesy || ' ' || firstname as "employee name" ,
birthname, city, from employees
SELECT from employees`
9. Display all employee details along with phone number. Phone number should be displayed without Country code.(Country code is mentioned in bracket (71))
→
`SELECT employeedetails , substr(phonenum,5) "phone number" from employees`
10. Display customer's id , company name, address, city and region.Any column should not display null values in the report. Display some proper alternative value in place of null.

→

```
SELECT customerid,nvl( companyname,'Name not  
mentioned'),nvl(address,'mainroad'),nvl(city,'Pune'),nvl(region,'Pune') from  
customers
```

11. Display Joining date along with probation period end date for each employee.
Assume probation period is for 3 months)

→

```
SELECT joiningdate, add_months(joiningdate,3) as 'Probation period end date' from  
employees
```

12. Find the tenure of each employee in the company.

→

```
Select employeeid,round(sysdate-hiredate)as tenure from employees;
```

13. Display employeeid, full name of an employee in upper case, job title in Lower case
for all the employees.

→

```
SELECT EMPLOYEEID,UPPER(firstname || ' ' || lastname as 'Full  
name'),LOWER(jobtitle) from employees;
```