

# SQL

# Exercise 1

## Northwind database

1. Which shippers do we have?
2. Retrieve all columns in the region table
3. Select the firstname and lastname columns from the employees table.
4. Select the firstname and lastname columns from the employees table. Sort by lastname.
5. Select name and unitprice of all products

# Exercise 2

## Northwind database

1. Find the companies (the customerid) that placed orders in 1997
2. Show all the orders placed by a specific employee on Mondays in 1997. The employeeid for this employee (Steven Buchanan) is 5.
3. Select names and addresses of customers from London
4. Select names and addresses of customers from Spain and from France
5. Select names of products with a price less than 10 or greater than 20
6. Select names of products with a price between 20.00 a 30.00

# Exercise 3

## Northwind database

1. **Select names of products from the 'Meat/Poultry' category**
2. **Select names of products supplied by 'Tokyo Traders'**
3. **Write a query showing orders sorted by freight from most expensive to cheapest. Show orderid, orderdate, shippeddate, customerid, and freight.**
4. **Write a query showing the title and the first and lastname of all sales representatives.**
5. **Show the supplierid, contactname, and contacttitle for those suppliers whose contacttitle is not Marketing Manager.**
6. **Write a query showing the first and last names of all employees who have a region specified.**

# Exercise 4

## Northwind database

1. Write a query showing the first and last names of all employees who have a region specified, showing the title of courtesy and the first and last name. Show only employees whose title of courtesy begins with "M".
2. Write a query showing the first and last names of all employees who have a region specified. showing the first and last name of all sales representatives who are from Seattle or Redmond.
3. Write a query showing the first and last names of all employees who have a region specified. that shows the company name, contact title, city and country of all customers in Mexico or in any city in Spain except Madrid.
4. Write a query that shows the orderid, customerid, and shipcountry for the orders where the shipcountry is either France or Belgium.
5. Show orders shipping to any country in Latin America

# Exercise 5

## Northwind database

1. Search for information about products packed in bottles
2. In the products table, we'd like to see the productid and ProductName for those products where the productname includes the string 'queso'.
3. Search for the names and positions of employees whose names start with the letter range from B to L
4. Search for the position of employees whose names start with the letter B or L
5. Show products with product names that begin with the letter T or have a product identification number of 46, and that have a price greater than \$16.00
6. Show products with product names that begin with the letter T or that have a product identification number of 46 and a price greater than \$16.00

# Exercise 6

## Northwind database

1. If the cost of freight is greater than or equal to \$500.00, it will now be taxed by 10%. Create a report that shows the order id, freight cost, freight cost with this tax for all orders of \$500 or more.
2. Select the order number, order date, and customer number for all unsent orders for which the recipient's country is Argentina
3. Incorporate these fields: unitsinstock, unitsonorder, reorderlevel, discontinued, into calculation. We'll define "products that need reordering" with the following: unitsinstock plus unitsonorder are less than or equal to reorderlevel. The discontinued flag is false (0).
4. Write a command that calculates the value of each order item for order number 10250
5. Show the firstname and LastName columns from the employees table, and then create a new column called fullname, showing firstname and lastname joined together in one column, with a space in-between.
6. Write a query that for each supplier will show a single column containing the phone number and fax number separated with a comma

# Exercise 7

## Northwind database

1. **Select all orders shipped in May 1996. Calculate the number of days from the date of order to the shipment**
2. **For each employee, display the first name, last name, year of birth, year of employment, the age at the time of employment**
3. **Show how many years have passed since January 1, 1990.**
4. **Show how many days have passed since January 1, 1990.**



# Exercise 8

library database

1. Write a query that retrieves the title and title\_no columns from the title table
2. Write a query that retrieves the title\_no and the title as a single text column. Separate the values with a space.
3. Write query that retrieves the member numbers and assessed fines from the loanhist table for all members who have had fines between \$8.00 and \$9.00.
4. Write query that retrieves the title number and author from the title table for all books authored by Charles Dickens or Jane Austen. Use the IN operator as part of the SELECT statement.

# Exercise 9

library database

1. Write query that retrieves the title number and title from the title table for all rows that contain the character string “adventures” in the title
2. Write a query that retrieves all of the unique pairs of cities and states from the adult table
3. Write a query that retrieves a sorted list of all titles from the title table
4. Write a query that returns the member\_no, isbn, and fine\_assessed columns from the loanhist table of all archived loans with a non-null value in the fine\_assessed column. Create a new column in the result set that contains the computed value of the fine\_assessed column multiplied by two, name this column double fine.
5. Write a query that generates a single column that contains the firstname, middleinitial, and lastname columns from the member table for all members with the last name Anderson (convert all characters to lowercase). Name this column email\_name

# Exercise 10

library database

1. Write and execute a query that retrieves the title and title\_no columns from the title table. Your result set should be a single column with the following format:

The title is: Poems, title number 7

This query returns a single column based on an expression that concatenates four elements:

The title is: string constant

title.title column

title number string constant

title.title\_no column