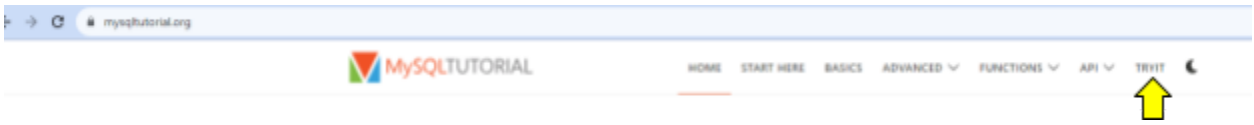
Databases:

**** The following queries are based on the “SandBox” from mysqltutorial.org



1. Retrieve the list of all employees’ first names.
2. Get only the "productName" column from the "products" table

```
SELECT productName
FROM products;
```

3. Retrieve the "city" column from the "offices" table

```
SELECT city
FROM offices;
```

4. Get only the "orderDate" column from the "orders" table

```
SELECT orderDate
FROM orders;
```

5. Select the "productLine" column from the "productlines" table

```
SELECT productLine
FROM productlines;
```

6. Retrieve the "customerName" and "contactFirstName" columns from the "customers" table

```
SELECT customerName, contactFirstName
FROM customers;
```

7. Get the "productName" and "buyPrice" columns from the "products" table

```
SELECT productName, buyPrice
FROM products;
```

8. Select the "firstName" and "lastName" columns from the "employees" table

```
SELECT firstName, lastName
FROM employees;
```

9. Retrieve the "city" and "country" columns from the "offices" table

```
SELECT city, country
FROM offices;
```

10. Get the "orderNumber" and "orderDate" columns from the "orders" table

```
SELECT orderNumber, orderDate
FROM orders;
```

11. Retrieve the "customerName," "contactFirstName," and "contactLastName" columns from the "customers" table

```
SELECT customerName, contactFirstName, contactLastName
FROM customers;
```

12. Get the "productCode," "productName," and "buyPrice" columns from the "products" table

```
SELECT productCode, productName, buyPrice
FROM products;
```

13. Select the "employeeNumber," "firstName," and "lastName" columns from the "employees" table

```
SELECT employeeNumber, firstName, lastName
FROM employees;
```

14. Retrieve the "officeCode," "city," and "country" columns from the "offices" table

```
SELECT officeCode, city, country
FROM offices;
```

15. Get the "orderNumber," "orderDate," and "status" columns from the "orders" table

```
SELECT orderNumber, orderDate, status
FROM orders;
```

16. Retrieve the list of all employees' first & last name.

17. Retrieve all columns from the "customers" table

```
SELECT *
FROM customers;
```

18. Get all columns from the "products" table

```
SELECT *
FROM products;
```

19. Select all columns from the "employees" table

```
SELECT *
FROM employees;
```

20. Retrieve all columns from the "offices" table

```
SELECT *
FROM offices;
```

21. Get all columns from the "orders" table

```
SELECT *
FROM orders;
```

22. Retrieve the list of all employees' last name , email & job title.

23. Retrieve all columns from the "customers" table and order the results by customer name in ascending order

```
SELECT *
FROM customers
ORDER BY customerName ASC;
```

24. Get all columns from the "products" table and order the results by buy price in descending order

```
SELECT *
FROM products
ORDER BY buyPrice DESC;
```

25. Get a list of distinct offices by city

```
SELECT DISTINCT city
FROM offices;
```

26. List the distinct job titles of employees

```
SELECT DISTINCT jobTitle
FROM employees;
```

27. Retrieve distinct countries where customers are located

```
SELECT DISTINCT country
FROM customers;
```

28. Get a list of distinct order statuses

```
SELECT DISTINCT status
FROM orders;
```

29. Retrieve all columns for all employees.
30. List all columns for employees, and sort the results by their last names in alphabetical order

```
SELECT *
FROM employees
ORDER BY lastName;
```

31. Retrieve all columns for all customers

```
SELECT *
FROM customers
ORDER BY customerNumber;
```

32. Retrieve the list of all customers' names.
33. Retrieve a list of all customers in alphabetical order by customer name.

```
SELECT customerName
FROM customers
ORDER BY customerName;
```

34. Retrieve the list of all customers' names and their country.
35. Retrieve the list of all customers and their contact details (name, phone, email).

```
SELECT customerName, phone, email
FROM customers;
```

36. Retrieve the names and credit limits of customers with a credit limit greater than $50,000.

```
SELECT customerName, creditLimit
FROM customers
WHERE creditLimit > 50000;
```

37. Get the product names and quantities ordered for products with a quantity ordered greater than 30.

```
SELECT productName, quantityOrdered
FROM orderdetails
WHERE quantityOrdered > 30;
```

38. Retrieve a list of customer details for customers who are located in France.

```
SELECT * FROM `customers`
WHERE country = "france";
```

39. Retrieve office codes and city names from the "offices" table where the city name starts with the letter "L"

```
SELECT officeCode, city
FROM offices
WHERE city LIKE 'L%';
```

40. Retrieve customer names and contact names from the "customers" table where the contact last name starts with "D" and is followed by any characters

```
SELECT customerName, contactLastName, contactFirstName
FROM customers
WHERE contactLastName LIKE 'D%';
```

41. Get product names and product codes from the "products" table where the product code starts with "S10_" and is followed by any characters

```
SELECT productName, productCode
FROM products
WHERE productCode LIKE 'S10_%';
```

42. Retrieve office codes and postal codes from the "offices" table where the postal code contains the pattern "9XXX" ((X can be replaced with any digit))

```
SELECT officeCode, postalCode
FROM offices
WHERE postalCode LIKE '9___';
```

43. Get order numbers and order dates from the "orders" table where the order date is in the year 2004

```
SELECT orderNumber, orderDate
```

```
FROM orders
WHERE orderDate LIKE '2004%';
```

44. Select employee names and email addresses from the "employees" table where the employees' first name doesnt start with "N" letter.

```
select firstName , lastName , email
FROM employees
WHERE firstName NOT LIKE "N%"
```

45. Retrieve office codes and cities from the "offices" table where the city name ends with "o"

```
SELECT officeCode, city
FROM offices
WHERE city LIKE '%o';
```

46. Retrieve details about the last 5 products that were ordered from "orders".

```
SELECT * FROM `orders`
order BY orderDate DESC
LIMIT 5;
```

47. List the products that have a price greater than $50

```
SELECT productName, buyPrice
FROM products
WHERE buyPrice > 50;
```

48. Get all columns for products, and sort the results by product code in descending order

```
SELECT *
FROM products
ORDER BY productCode DESC;
```

49. Retrieve all columns for orders and order the results by order date in ascending order

```
SELECT *
FROM orders
ORDER BY orderDate;
```

50. List the products in descending order of their buy price.

```
SELECT productName, buyPrice
FROM products
ORDER BY buyPrice DESC;
```

51. Retrieve the order numbers and order dates for all orders, sorted by order date in ascending order.

```
SELECT orderNumber, orderDate
FROM orders
ORDER BY orderDate;
```

52. List the offices in descending order of their city.

```
SELECT officeCode, city
FROM offices
ORDER BY city DESC;
```

53. Get the office codes and postal codes for offices located in state of CA (California).

```
SELECT officeCode, postalCode
FROM offices
WHERE state = 'CA';
```

54. Retrieve the order numbers and order dates for orders placed before January 1, 2005

```
SELECT orderNumber, orderDate
FROM orders
WHERE orderDate < '2005-01-01';
```

55. Retrieve the names and phone numbers of customers from the USA.

```
SELECT customerName, phone , country
FROM customers
WHERE country = 'USA';
```

56. Get order numbers and order dates from the "orders" table where the order date is in the year 2005 and the status is "Shipped"

```
SELECT orderNumber, orderDate
FROM orders
WHERE orderDate LIKE '2005%' AND status = 'Shipped';
```

```

```

57. Retrieve the product line IDs and text descriptions for product lines that have a text description containing "Unique."

```
SELECT productLine, textDescription
FROM productlines
WHERE textDescription LIKE '%Unique%';
```

58. Retrieve the names and phone numbers of customers from the USA or France

```
SELECT customerName, phone, country
FROM customers
WHERE country = 'USA' OR country = 'France';
```

59. Get the product names and buy prices for products with a buy price between $50 and $100

```
SELECT productName, buyPrice
FROM products
WHERE buyPrice BETWEEN 50 AND 100;
```

60. Retrieve the order numbers and order dates for orders placed before January 1, 2005, or after December 31, 2007

```
SELECT orderNumber, orderDate
FROM orders
WHERE orderDate < '2005-01-01' OR orderDate > '2007-12-31';
```

61. Get the office codes and postal codes for offices located in California (CA) or New York (NY)

```
SELECT officeCode, postalCode, state
FROM offices
WHERE state = 'CA' OR state = 'NY';
```

62. Retrieve the product names and buy prices for products with a buy price between $20 and $50, and the product name contains "Car."

```
SELECT productName, buyPrice
FROM products
WHERE buyPrice BETWEEN 20 AND 50 AND productName LIKE '%Car%';
```

63. List the customer names, phone numbers, and credit limits for customers from France, USA, or Germany with a credit limit greater than $50,000.

```
SELECT customerName, phone, creditLimit
FROM customers
WHERE country IN ('France', 'USA', 'Germany') AND creditLimit > 50000;
```

64. Retrieve the customer names and credit limits for customers whose credit limit is either less than $10,000 or greater than $100,000.

```
SELECT customerName, creditLimit
FROM customers
WHERE creditLimit < 10000 OR creditLimit > 100000;
```

65. Get the product names and buy prices for products with a buy price less than $30 or a product name containing "Motorcycle.

```
SELECT productName, buyPrice
FROM products
WHERE buyPrice < 30 OR productName LIKE '%Motorcycle%';
```

66. Retrieve distinct product codes

```
SELECT DISTINCT productCode
FROM products;
```

67. Retrieve customers with a NULL value in the credit limit column

```
SELECT customerName, creditLimit
FROM customers
WHERE creditLimit IS NULL;
```

68. Get product codes and product names for products with a NULL value in the product scale column

```
SELECT productCode, productName
FROM products
WHERE productScale IS NULL;
```

69. List order numbers and comments for orders with NULL comments

```
SELECT orderNumber, comments
FROM orders
WHERE comments IS NULL;
```

70. Retrieve the first 5 customers (customer name , contact last & first name) from the "customers" table

```
SELECT customerName, contactLastName, contactFirstName
FROM customers
LIMIT 5;
```

71. Retrieve a list of customers and provide an alias for the customer name column:

```
SELECT customerName AS "Customer Name"
FROM customers;
```

72. List product names and their corresponding buy prices with aliases

```
SELECT productName AS "Product Name", buyPrice AS "Price"
FROM products;
```

73. Retrieve order details, including order numbers and product codes, and provide aliases for these columns

```
SELECT orderNumber AS "Order Number", productCode AS "Product Code"
FROM orderdetails;
```

74. Get the names of product lines and provide an alias for the product line column

```
SELECT productLine AS "Line Name"
FROM productlines;
```

75. Get a list of employees with their full names and provide aliases for the first and last name columns

```
SELECT CONCAT(firstName, ' ', lastName) AS "Full Name"
FROM employees;
```

76. Retrieve a list of customers and order them by customer name in ascending order, limiting the results to the first 10 customers

```
SELECT customerName
FROM customers
ORDER BY customerName ASC
LIMIT 10;
```

77. Get a list of products ordered by their buy price in descending order, limiting the results to the first 5 products

```
SELECT productName, buyPrice
FROM products
ORDER BY buyPrice DESC
LIMIT 5;
```

78. List the order numbers and order dates for all orders, sorted by order date in ascending order, and limit the results to the first 20 orders

```
SELECT orderNumber, orderDate
FROM orders
ORDER BY orderDate ASC
LIMIT 20;
```

79. Get the office codes and cities for offices in alphabetical order of city names, and limit the results to the first 3 offices

```
SELECT officeCode, city
FROM offices
ORDER BY city ASC
LIMIT 3;
```

80. Get the product codes and product names for products ordered by product name in ascending order, and limit the results to the first 12 products

```
SELECT productCode, productName
FROM products
ORDER BY productName ASC
LIMIT 12;
```

81. Get order numbers and order dates for orders in descending order of order date, and limit the results to the first 7 orders

```
SELECT orderNumber, orderDate
FROM orders
ORDER BY orderDate DESC
LIMIT 7;
```

82. find employees whose first names start with the letter T , end with the letter m, and contain any single character between

```
SELECT
   employeeNumber,
   lastName,
   firstName
FROM
   employees
WHERE
```

```
    firstname LIKE 'T_m';
```

83. search for employees whose last names don’t start with the letter B

```
SELECT
    employeeNumber,
    lastName,
    firstName
FROM
    employees
WHERE
    lastName NOT LIKE 'B%';
```

84. find products whose product codes contain the string “_20”

```
SELECT
    productCode,
    productName
FROM
    products
WHERE
    productCode LIKE '%\_20%';
```

85. Retrieve customer names and contact names from the "customers" table where the contact last name is not NULL

```
SELECT customerName, contactLastName, contactFirstName
FROM customers
WHERE contactLastName IS NOT NULL;
```

86. Get product names and product codes from the "products" table where the product code is not NULL

```
SELECT productName, productCode
FROM products
WHERE productCode IS NOT NULL;
```

87. Select employee names from the "employees" table as “employee name “ where the extension is not NULL

```
SELECT CONCAT(firstName, ' ', lastName) AS employeeName
FROM employees
WHERE extension IS NOT NULL;
```

88. Retrieve office codes and postal codes from the "offices" table where the postal code is not NULL

```
SELECT officeCode, postalCode
FROM offices
WHERE postalCode IS NOT NULL;
```

89. Retrieve the total quantity ordered across all orders

```
SELECT SUM(quantityOrdered) AS totalQuantityOrdered
FROM orderdetails;
```

90. Get the total payment amount across all payments

```
SELECT SUM(amount) AS totalPaymentAmount
FROM payments;
```

91. Select the total sales across all employees

canceled

92. Get the average credit limit across all customers

```
SELECT AVG(creditLimit) AS averageCreditLimit
FROM customers;
```

93. Select the average budget across all offices

canceled

94. Display Total Quantity Ordered and Average Quantity Ordered for All Orders

```
SELECT
   SUM(quantityOrdered) AS totalQuantityOrdered,
   AVG(quantityOrdered) AS averageQuantityOrdered
FROM
   orderdetails;
```

95. Display Total Payment Amount and Average Payment Amount for All Customers

```
SELECT
   SUM(amount) AS totalPaymentAmount,
   AVG(amount) AS averagePaymentAmount
FROM
   payments;
```

96. Display Total Sales and Average Sales for All Employees

canceled

97. Display the Total Buy Price and Average Buy Price for All Products

```
SELECT
   SUM(buyPrice) AS totalBuyPrice,
   AVG(buyPrice) AS averageBuyPrice
FROM
   products;
```

98. Display the Total Credit Limit and Average Credit Limit for All Customers

```
SELECT
   SUM(creditLimit) AS totalCreditLimit,
   AVG(creditLimit) AS averageCreditLimit
FROM
   customers;
```

99. Display the Total Budget and Average Budget for All Offices

```
SELECT
   SUM(budget) AS totalBudget,
   AVG(budget) AS averageBudget
FROM
   offices;
```

100. Retrieve office codes and cities for the offices 1,2,4

```
SELECT officeCode, city
FROM offices
WHERE officeCode IN ('1', '2', '4');
```