

Common Functions

Exercise Handout

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Overview

In this exercise you will use the QASore database and write SQL SELECT statements to query the contents of its tables using some common functions.

Objectives

At the end of this lab, you will be able to:

- use string functions
- use date functions
- perform casting and rounding

Setup: Launch SQL Server Management Studio (if necessary)

1. Launch the virtual machine.
2. Launch SQL Server Management Studio.
3. Connect to the server.

Exercise 1: String functions

Write a query that selects all the salespeople from table salesperson of QAStore database who meet the following conditions:

- Display the emp_no for each sales person.
- Display the first character of the sales persons first name.
- Concatenate the two names together with a space between them.

If you do it right then the results should look like the following:

emp_no	name
10	A Brick
20	B Custard
30	C Digger
40	D Ernst
50	E Flipper
60	F Goalie

Exercise 2: Manipulating strings

Write a query that adds another column to your previous query which shows the county name in UPPERCASE.

If you do it right then the results should look like the following:

emp_no	name	county
10	A Brick	SURREY
20	B Custard	HAMPSHIRE
30	C Digger	HAMPSHIRE
40	D Ernst	LONDON
50	E Flipper	SURREY
60	F Goalie	SURREY

Exercise 3: Work with date functions

Write a query that lists the year, month and day of month of each sale (from the sale table).

If you do it right then the results should look like the following:

order_no	order_year	order_month	order_day
100	2000	6	24
200	2000	5	1
300	2000	7	14
400	2000	8	9
500	2000	7	23
600	2000	5	23
700	2000	1	23
800	2000	12	15

Exercise 4: Perform rounding

Task 1: Create a query that outputs a calculated column

Write a query to return a new calculated sales_target for each department. The new sales_target to calculate will be increased by 63.8%.

dept_no	new_target
1	8.1900000
2	24.5700000
3	40.9500000
4	8.1900000
5	73.7100000

Task 2: Round the values in the calculated column to one decimal place

Amend this query so that the target is **rounded** to one decimal place. Before doing this – write down what you think the answers will be.

If you do it right then the results should look like the following:

dept_no	new_target
1	8.2000000
2	24.6000000
3	41.0000000
4	8.2000000
5	73.7000000

Task 3: Round the values in the calculated column to integer

Amend this query so that the target is **rounded** to integer (no decimal places). Before doing this – write down what you think the answers will be.

If you do it right then the results should look like the following:

dept_no	new_target
1	8.0000000
2	25.0000000
3	41.0000000
4	8.0000000
5	74.0000000

Task 4: Cast the values in the calculated column as integer

Amend this query so that the target is **displayed** with no decimal places and no rounding. Before doing this – write down what you think the answers will be.

If you do it right then the results should look like the following:

dept_no	new_target
1	8
2	24
3	40
4	8
5	73



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