

F_ZAHLRUNDEN, F_ROUNDCOMMON

compatibility FreeUDFLib AvERP, GrUDF

input/output-compatibility to rFunc (ROUND)

Entrypoint zahlrunden compatible with UTF-8

Inputs/Outputs

Input	DOUBLE	floatingpoint to be round
	INTEGER	number of digits to be round
Output	DOUBLE	floatingpoint rounded (trading method)

Syntax

Round-to-nearest. Described in German standard DIN 1333.

From Wikipedia [[<http://en.wikipedia.org/wiki/Rounding>]]:

This method is commonly used, for example in accounting. It is the one generally taught in basic mathematics classes.

- * Decide which is the last digit to keep.

- * Increase it by 1 if the next digit is 5 or more (this is called rounding up)

- * Leave it the same if the next digit is 4 or less (this is called rounding down)

Examples:

- * 3.044 rounded to hundredths is 3.04 (because the next digit, 4, is less than 5).

- * 3.046 rounded to hundredths is 3.05 (because the next digit, 6, is 5 or more).

- * 3.0447 rounded to hundredths is 3.04 (because the next digit, 4, is less than 5).

Negative numbers are rounded like their absolute values:

- * -2,1349 to -2,13 €

- * -2,1350 to -2,14 €

TestSQL

```
SELECT 14.5 AS ISCORRECT, F_ZAHLRUNDEN(14.4935, 1) FROM RDB$DATABASE;
```

```
SELECT 14.49 AS ISCORRECT, F_ZAHLRUNDEN(14.4935, 2) FROM RDB$DATABASE;
```

```
SELECT 14.494 AS ISCORRECT, F_ZAHLRUNDEN(14.4935, 3) FROM RDB$DATABASE;
```

```
SELECT -14.494 AS ISCORRECT, F_ZAHLRUNDEN(-14.4935, 3) FROM RDB$DATABASE;
```

```
SELECT 14.494 AS ISCORRECT, F_ZAHLRUNDEN(14.4936, 3) FROM RDB$DATABASE;
```

```
SELECT 14.4935 AS ISCORRECT, F_ZAHLRUNDEN(14.4935, 6) FROM RDB$DATABASE;
```

```
SELECT 40.43 AS ISCORRECT, F_ZAHLRUNDEN(40.425, 2) FROM RDB$DATABASE;  
SELECT 40.42 AS ISCORRECT, F_ZAHLRUNDEN(40.4242, 2) FROM RDB$DATABASE;  
SELECT 40.42 AS ISCORRECT, F_ZAHLRUNDEN(40.4246, 2) FROM RDB$DATABASE;  
SELECT 75.15 AS ISCORRECT, F_ZAHLRUNDEN(395.50 * (19.00 / 100), 2) FROM  
RDB$DATABASE;  
SELECT NULL AS ISCORRECT, F_ZAHLRUNDEN(NULL, NULL) FROM RDB$DATABASE;
```

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