

# APPENDIX F

## Glossary of Common SQL Functions

### String Functions

#### ASCII

ASCII(string)

The ASCII() function returns the the ascii code value of the leftmost string passed to it.

#### CHAR

CHAR(N1,N2,N3,...)

The CHAR() functions returns the ASCII character string of each of the integer arguments that is passed to it.

#### COALESCE

COALESCE(expression1 , expression2, expression3,...)

The COALESCE() function returns the first non-NULL value from the list of arguments passed to it.

#### CONCAT

CONCAT(string1,string2,...)

The CONCAT() function is used to concatenate the values of any number of string arguments passed to it.

#### CONCAT\_WS

CONCAT\_WS(separator, string1, string2,...)

The CONCAT\_WS() function is similar to CONCAT(), except that it concatenates the string arguments together, separated by the separator value.

**INSTR**

INSTR(basestring, string)

The INSTR() function returns the position of the `string` argument within the `basestring` argument. If the `string` argument is not found, the function returns `0`.

**ISNULL**

ISNULL(expression)

The ISNULL() function is used to determine whether the `expression` is a `NULL` value. If the `expression` is `NULL`, a `1` is returned; otherwise, a `0` is returned.

**LOWER**

LOWER(string)

The LOWER() function returns the lowercase equivalent of the `string` argument passed to it.

**LEFT**

LEFT(string, length)

The LEFT() function returns the leftmost `length` of characters from the `string` argument.

**LENGTH**

LENGTH(string)

The LENGTH() function returns the length of the `string` argument measured in bytes.

**LTRIM**

LTRIM(string)

The LTRIM() function returns the `string` argument with the leading spaces removed.

**RIGHT**

RIGHT(string, length)

The RIGHT() function returns the rightmost `length` of characters from the `string`.

**RTRIM**

RTRIM(string)

The `RTRIM()` function returns the `string` argument with all the trailing spaces removed.

### **SUBSTRING**

`SUBSTRING(string, position, length)`

The `SUBSTRING()` function returns the substring of the `string` argument starting at a given `position` for a specific `length` of characters. Optionally, `length` can be left out, in which case the `SUBSTRING()` function will start at the given `position` and return everything to the end of the `string`.

### **UPPER**

`UPPER(string)`

The `UPPER()` function returns the `string` argument's uppercase equivalent.

## **Numeric Functions**

### **ABS**

`ABS(expression)`

The `ABS()` function returns the absolute value of the `expression`.

### **CEILING**

`CEILING(expression)`

The `CEILING()` function returns the smallest integer value that is not less than the `expression`.

### **FLOOR**

`FLOOR(expression)`

The `FLOOR()` function returns the largest integer that is not greater than the `expression`.

### **ROUND**

`ROUND(expression, precision)`

The `ROUND()` function rounds the `expression` to the given number of decimal places. If `precision` is `0` or not included, the result will not have a decimal point.

### **TRUNCATE**

`TRUNCATE(expression, precision)`

The `TRUNCATE()` function returns the expression truncated to the number of decimal places. Like the `ROUND()` function, if the precision argument is 0 or not included, the result will not have a decimal point.

## Aggregate Functions

### **AVG**

`AVG(expression)`

The `AVG()` function returns the average of the expression.

### **COUNT**

`COUNT(expression)`

The `COUNT()` function returns the count of the items in the expression.

### **MAX**

`MAX(expression)`

The `MAX()` function returns the maximum value of the expression.

### **MIN**

`MIN(expression)`

The `MIN()` function returns the minimum value of the expression.

### **SUM**

`SUM(expression)`

The `SUM()` function returns the sum of the values of the expression.

## Date-Time Functions

### **CURDATE**

`CURDATE()`

The `CURDATE()` function returns the current date on the system in either YYYY-MM-DD or YYYYMMDD format, depending on whether it is being used in a string or numeric context.

**CURTIME**`CURTIME()`

The `CURTIME()` function returns the current time on the system.

**DATE\_ADD**`DATE_ADD(date, interval, expression)`

The `DATE_ADD()` function returns the date value with `interval` value added or subtracted by an amount determined by the `expression`. If the `expression` value is negative, the `interval` is subtracted, and if it is positive, the `interval` is added. The `interval` can be any number of types, such as `YEAR`, `MONTH`, `DAY`, and so on. For a complete list of available interval types, please refer to the MySQL documentation.

**SYSDATE**`SYSDATE()`

The `SYSDATE()` function returns the current date and time on the system.

