CHARACTER CODES

ASCII ('C')

Returns the ASCII code value of the leftmost character of 'C'

```
ASCII ('A') = 65
ASCII ('BEE') = 66
```

CHAR (A)

Converts an integer ASCII code A to a character

```
CHAR (65) = 'A'
CHAR (1000) = NULL
```

UNICODE (A)

Returns the int value for the first character of 'A'

```
UNICODE('A') = 65
```

NCHAR (A)

Returns the Unicode character with the specified integer code A

```
NCHAR (66000) = NULL
NCHAR (8) = ''
NCHAR ('8') = ''
```

SEARCH & REPLACE

CHARINDEX ('A', 'B', [, S])

Searches 'B' for 'A' and returns its starting position if found. The search starts at S

```
CHARINDEX ('Z', 'HELLO') = 0
CHARINDEX ('H', 'HELLO') = 1
CHARINDEX ('OR', 'WORLD') = 2
CHARINDEX ('L', 'HELLO', 4) = 4
```

REPLACE ('A', 'B', 'C')

Replaces in 'A' all occurrences of string 'B' with string 'C'

```
REPLACE('HELLOW',NULL,'')=NULL
REPLACE('HELLOW','','_')='HELLOW'
REPLACE('HELLOW','ELLOW','I')='HI'
REPLACE('HELLOW','L',1) = 'HE11OW'
```

PATINDEX ('%pattern%' , 'A')

Returns starting position of the first occurrence of a %pattern% in string 'A'

```
PATINDEX('H','HELLO') = 0
PATINDEX('H%','HELLO') = 1
PATINDEX('%L_%','HELLO') = 3
PATINDEX('%L_','HELLO') = 4
PATINDEX ('Z','HELLO') = 0
PATINDEX('%A[0-9]%','AA1A') = 2
PATINDEX('%L[^L]%','HELLO') = 4
```

STUFF ('A', S, L, 'B')

Replaces L characters of 'A' starting at S with 'B'

```
STUFF('HELLOW',2,5,'I') = 'HI'
STUFF('HELLOW',2,15,'I') = 'HI'
STUFF('HELLOW',20,1,'I') = NULL
STUFF('HELLOW',0,1,'I') = NULL
STUFF('HELLOW',1,0,'I') = 'IHELLOW'
```

SOUNDEX & OTHER

SOUNDEX ('A')

Returns a four-character (SOUNDEX) code to evaluate the similarity of two strings

```
SOUNDEX ('Smith') = 'S530'
SOUNDEX ('Smythe') = 'S530'
```

DIFFERENCE ('A', 'B')

Returns an integer value that indicates the difference between the SOUNDEX of 'A' and 'B'

```
DIFFERENCE('GREEN','GREENE') = 4
```

LEN ('A')

Returns length of 'A', excluding trailing blanks

```
LEN ('HELLOW WORD') = 11
LEN ('HELLOW ') = 6
LEN (12) = 2
LEN ('') = 0
```

STRING EXTRACTION

SUBSTRING ('A', start, length)

Returns L characters of 'A' starting at S

```
SUBSTRING('HELLOW',2,1) = 'E'
SUBSTRING('HELLOW',5,10) = 'OW'
SUBSTRING('HELLOW',10,1) = ''
SUBSTRING('HELLOW',0,1) = ''
SUBSTRING('HELLOW',1,0) = ''
```

LEFT ('A', B) / RIGHT ('A', B)

Returns the left/right part of 'A' with the specified number B

```
RIGHT ('', 1) = ''
LEFT ('HI', 0) = ''
RIGHT ('HI', 3) = 'HI'
RIGHT ('HELLOW WORLD',5) = 'WORLD'
LEFT ('HELLOW WORLD', 6) = 'HELLOW'
```

STRING GENERATION

SPACE (A)

Returns a string of A spaces

```
SPACE(2) = '  '
```

REPLICATE ('A', B)

Repeats a string value 'A' specified number of times B

```
REPLICATE ('0', 4) = '0000'
REPLICATE ('-', 0) = ''
REPLICATE ('-', NULL) = NULL
```

STR (A [,length [, decimal]])

Converts A number to string

```
STR (2.234) = '      2'
STR (2.234, 4) = '   2'
STR (2.234, 4, 2) = '2.23'
STR (2.234, 6, 2) = '  2.23'
```

STRING MANIPULATION

CONCAT ('A', 'B' [,'C'])

Returns a string that is the result of concatenating two or more string values

```
CONCAT('HELLO')=ERROR
CONCAT(NULL, NULL)= ''
CONCAT('HI',' ','WORLD')='HI WORLD'
CONCAT(12,NULL,34) = '1234'
CONCAT(2014,12,31) = '20141231'
```

LOWER ('A') / UPPER ('A')

Makes 'A' lowercase/uppercase

```
LOWER ('HI') = 'hi'
UPPER ('hi') = 'HI'
```

LTRIM ('A') / RTRIM ('A')

Returns 'A' removing leading/trailing blanks

```
LTRIM (' HI ') = 'HI '
LTRIM (' ') = ''
RTRIM(' HI ') = ' HI'
```

QUOTENAME ('A', ['B'])

Makes 'A' a valid SQL Server using 'B' delimiter

```
QUOTENAME('TB NAME')=[TB NAME]
QUOTENAME('TB NAME', ']')=[TB NAME]
QUOTENAME('TB NAME', '"')="TB NAME"
QUOTENAME('abc[]def')=[abc[]]def]
QUOTENAME('TB NAME', '''')='TB NAME'
```

REVERSE ('A')

Returns the reverse order of a string value

```
REVERSE('HELLOW') = 'WOLLEH'
REVERSE(12) = 21
```

SQL Server String Functions Cheat Sheet by SqlBak.com