```
/*-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-! */
/*-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-! */
/*-!-!-!-!-!-!- SQL BUILT IN FUNCTIONS !-!-!-!-!-!-! */
/*-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-! */
/*-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-!-! */
```

```
/****** ROWSET FUNCTIONS ******/
OPENDATASOURCE, OPENQUERY, OPENROWSET, OPENJSON, OPENXML

/****** AGGREGATE FUNCTIONS ******/
AVG, CHECKSUM_AGG, COUNT, COUNT_BIG, GROUPING, GROUPING_ID, MAX, MIN,
SUM, STDEV, STDEVP, VAR, VARP

/****** RANKING FUNCTIONS ******/
RANK, DENSE_RANK, NTILE, ROW_NUMBER

/****** CONFIGURATION FUNCTIONS ******/ (scalar)
@@DATEFIRST, @@DBTS, @@LANGID, @@LANGUAGE, @@LOCK_TIMEOUT,
@@MAX_CONNECTIONS, @@MAX_PRECISION, @@NESTLEVEL, @@OPTIONS,
@@REMSERVER,
@@SERVERNAME, @@SERVICENAME, @@SPID, @@TEXTSIZE, @@VERSION

/****** CONVERSION FUNCTIONS ******/ (scalar)
CAST AND CONVERT, PARSE, TRY_CAST, TRY_CONVERT, TRY_PARSE

/****** CURSOR FUNCTIONS ******/ (scalar)
@@CURSOR_ROWS, @@FETCH_STATUS, CURSOR_STATUS

/****** DATE AND TIME DATATYPES ******/ (scalar)
time, date, smalldatetime, datetime, datetime2, datetimeoffset

/****** DATE AND TIME FUNCTIONS ******/
-- Higher precision date and time functions (scalar)
SYSDATETIME, SYSTDATETIMEOFFSET, SYSUTCDATETIME
-- Lower precision date and time functions (scalar)
CURRENT_TIMESTAMP, GETDATE, GETUTCDATE
-- Functions that get date and time parts (scalar)
DATENAME, DATEPART, DAY, MONTH, YEAR
-- Functions that get date and time values from their parts (scalar)
DATEFROMPARTS, DATETIME2FROMPARTS, DATETIMEFROMPARTS,
DATETIMEOFFSETFROMPARTS, SMALLDATETIMEFROMPARTS, TIMEFROMPARTS
-- Functions that get date and time difference (scalar)
DATEDIFF, DATEDIFF_BIG
-- Functions that modify date and time values (scalar)
DATEADD, EOMONTH, SWITCHOFFSET, TODATETIMEOFFSET
-- Functions that set or get session format (scalar)
@@DATEFIRST, SETDATEFIRST, SETDATEFORMAT, @@LANGUAGE, SETLANGUAGE,
sp_helplanguage
-- Functions that validate date and time values (scalar)
```

ISDATE

/****** JSON FUNCTIONS ******/ (scalar)
ISJSON, JSON_VALUE, JSON_QUERY, JSON_MODIFY

/****** LOGICAL FUNCTIONS ******/ (scalar)
CHOOSE, IIF

/****** MATHEMATICAL FUNCTIONS ******/ (scalar)
ABS, ACOS, ASIN, ATAN, ATN2, CEILING, COS, COT, DEGREES, EXP, FLOOR, LOG, LOG10,
PI, POWER, RADIANS
RAND, ROUND, SIGN, SIN, SQRT, SQUARE, TAN

/****** METADATA FUNCTIONS ******/ (scalar)
-- These functions return informmation about the database and database objects (scalar functions)
@@PROCID, APP_NAME, APPLOCK_MODE, APPLOCK_TEXT, ASSEMBLYPROPERTY,
COL_LENGHT, COL_NAME, COLUMNPROPERTY
DATABASE_PRINCIPAL_ID, DATABASEPROPERTYEX, DB_ID, DB_NAME, FILE_ID,
FILE_IDEX, FILE_NAME, FILEGROUP_ID,
FILEGROUP_NAME, FILEGROUP_PROPERTY, FILEPROPERTY,
FULLTEXTCATALOGPROPERTY, FULLTEXTSERVICEPROPERTY
INDEX_COL, INDEXKEY_PROPERTY, INDEXPORPERTY, NEXT VALUE FOR,
OBJECT_DEFINITION, OBJECT_ID, OBJECT_NAME
OBJECT_SCHEMA_NAME, OBJECTPROPERTY, OBJECTPROPERTYEX,
ORIGINAL_DB_NAME, PARSENAME, SCHEMA_ID
SCHEMA_NAME, SCOPE_IDENTITY, SERVERPROPERTY, STATS_DATE, TYPE_ID,
TYPE_NAME, TYPEPROPERTY, VERSION

/****** SECURITY FUNCTIONS ******/ (scalar)
-- These functions return values that are useful in managing security
CERTENCODED, CERTPRIVATEKEY, CURRENT_USER, DATABASE_PRINCIPAL_ID,
sys.fn_builtin_permissions, sys.fn_get_audit_file
sys.fn_my_permissions, HAS_PERMS_BY_NAME, IS_MEMBER, IS_ROLEMEMBER,
IS_SRVROLEMEMBER, ORIGINAL_LOGIN, PERMISSIONS
PWDCOMPARE, PWDENCRYPT, SCHEMA_ID, SCHEMA_NAME, SESSION_USER, SUSER_ID,
SUSER_SID, SUSER_SNAME, SYSTEM_USER, SUSER_SNAME
USER_ID, USER_NAME

/****** STRING FUNCTIONS ******/ (scalar)
ASCII, CHAR, CHARINDEX, CONCAT, DIFFERENCE, FORMAT, LEFT, LEN, LOWER, LTRIM,
NCHAR, PATINDEX, QUOTENAME
REPLACE, REPLICATE, REVERSE, RIGHT, RTRIM, SOUNDEX, SPACE, STR,
STRING_ESCAPE, STRING_SPLIT, STUFF
SUBSTRING, UNICODE, UPPER

/****** SYSTEM FUNCTIONS ******/ (scalar)
$PARTITION, @@ERROR, @@IDENTITY, @@PACK_RECIEVED, @@ROWCOUNT,
@@TRANCOUNT, BINARY_CHECKSUM, CHECKSUM, COMPRESS

CONNECTIONPROPERTY, CONTEXT_INFO, CURRENT_REQUEST_ID,
CURRENT_TRANSACTION_ID, DECOMPRESS, ERROR_LINE, ERROR_MESSAGE
ERROR_NUMBER, ERROR_PROCEDURE, ERROR_SEVERITY, ERROR_STATE,
FORMATMESSAGE, GET_FILESTREAM_TRANSACTION_CONTEXT
GETANSINULL, HOST_ID, HOST_NAME, ISNULL, ISNUMERIC,
MIN_ACTIVE_ROWVERSION, NEWID, NEWSEQUENTIALID
ROWCOUNT_BIG, SESSION_CONTEXT, SESSION_ID, XACT_STATE

/****** SYSTEM STATISTICAL FUNCTIONS ******/ (scalar)
@@CONNECTIONS, @@CPU_BUSY, fn_virtualfilestats, @@IDLE, @@IO_BUSY,
@@PACKET_ERRORS, @@PACK_RECIEVED, @@PACK_SENT
@@TIMETICKS, @@TOTAL_ERRORS, @@TOTAL_READ, @@TOTAL_WRITE

/****** TEXT AND IMAGE FUNCTIONS ******/(scalar)
PATINDEX, TEXTPTR, TEXTVALID