



# SQL Server Cheat Sheet

## Data Types

### Exact Numerics

bigint  
bit  
int  
tinyint  
decimal

numeric  
smallint  
money  
smallmoney

### Aprox Numerics

float  
real

## Date & Time

datetime  
smalldatetime

### Strings

char  
varchar  
varchar(max)  
text

## Binary Strings

binary  
varbinary  
varbinary  
image

## Unicode Strings

nchar  
nvarchar(max)

nvarchar  
ntext

## Miscellaneous

Cursor  
sql\_variant  
table  
timestamp  
xml

## Short Cuts

SSMS 2005 -> sqlwb  
Execute Query -> F5  
Object browser -> F8  
Result Pane -> CTRL + R  
Full Screen -> Shift + Alt + Enter

## Type Conversion

CAST (expression AS datatype)  
CONVERT (datatype, expression)

## Functions

### Aggregate

AVG  
BINARY\_CHECKSUM  
CHECKSUM  
CHECKSUM\_AVG  
COUNT  
COUNT\_BIG  
GROUPING  
MAX  
MIN  
SUM  
STDEV  
STDEVP  
VAR  
VARP

### Cursor

@@CURSOR\_ROWS  
@@FETCH\_STATUS  
CURSOR\_STATUS

### String

ASCII  
CHAR  
CHARINDEX  
DIFFERENCE  
LEFT  
LEN  
LOWER  
LTRIM  
NCHAR  
PATINDEX

REPLACE  
QUOTENAME  
REPLICATE  
REVERSE  
RIGHT  
RTRIM  
SOUNDEX  
SPACE  
STR  
STUFF  
SUBSTRING  
UNICODE  
UPPER

### Mathematical

ABS  
ACOS  
ASIN  
ATAN  
ATAN2  
CEILING  
COS  
COT  
DEGREES  
EXP  
FLOOR  
LOG  
LOG10  
PI  
POWER  
RADIANS  
RAND

## SIGN

SIN  
SQUARE  
SQRT  
TAN

## Date

GETDATE ()  
GETUTCDATE ()  
DAY (date)  
MONTH (date)  
YEAR (date)  
DATEADD (datepart, number, date)  
DATEDIFF (datepart, start, end)  
DATENAME (datepart, date)  
DATEPART (datepart, date)

## Datepart

Year -> yy, yyyy  
Quarter -> qq, q  
Month -> mm, m  
Day of Year -> dy, y  
Day -> dd, d  
Week -> wk, ww  
Hour -> hh  
Minute -> mi, n  
Second -> ss, s

## Constraints

### Drop Constraint

ALTER TABLE <tablename> DROP  
CONSTRAINT <constraintName>

## Primary Key

ALTER TABLE <tablename> ADD  
CONSTRAINT <constraintName>  
PRIMARY KEY CLUSTERED  
(column\_list) ntext

## Default Key

ALTER TABLE <tablename> ADD  
CONSTRAINT <constraintName>  
DEFAULT (") FOR (ColumnName)

## Foreign Key

ALTER TABLE <table1> WITH CHECK  
ADD CONSTRAINT <constraintName>  
FOREIGN KEY(<table1col1>)  
REFERENCES <table2> (<table2col2>)

## T-SQL Statements

### UPDATE Statement

UPDATE table\_name  
SET column\_name = {expression |  
DEFAULT | NULL} [,...n]  
[WHERE <search\_condition>]

### DELETE Statement

DELETE [FROM] table\_name  
[WHERE <search\_condition>]

### INSERT Statement

INSERT [INTO] table\_name  
[(column\_list)]  
VALUES ({ DEFAULT | NULL |  
expression }[,...n])

## SELECT Statement

SELECT [DISTINCT] [{TOP int | TOP int PERCENT}]  
columns  
[INTO new\_table]  
FROM table\_source  
[[INNER | {{ LEFT | RIGHT | FULL }} [ OUTER ]] JOIN  
table\_source2  
ON table\_source.primary\_key =  
table\_source2.foreign\_key][,...n]  
[WHERE search\_condition]  
[GROUP BY group\_by\_expression]  
[HAVING search\_condition]  
[ORDER BY order\_expression [ASC | DESC]]

## Object Operation

### Stored Procedure

CREATE PROCEDURE <name> AS <sql\_statement>

### Views

CREATE VIEW <name> [(<Column1>,...)] AS  
<SELECT\_statement>

### Triggers

CREATE TRIGGER <name> ON <table>  
FOR INSERT, UPDATE, DELETE AS <sql\_statement>

### Functions

CREATE FUNCTION <name>  
RETURNS <data\_type>  
AS BEGIN <sql\_statement>  
RETURN <sql\_expression> END