

# T-SQL Window Functions

## Getting Started



Kathi Kellenberger

@aunkathi | aunkathisql.com

# What Are T-SQL Window Functions?

They have nothing to do with the Windows API

Operate over a set of rows

Always have an OVER clause

# Where Can I Add a Window Function?

## May appear in

- SELECT list
- ORDER BY clause

## Cannot be found in

- FROM clause
- WHERE clause
- GROUP BY clause
- HAVING clause

# New Ways to Solve Problems



Apply row numbers, rank,  
or divide rows

Aggregate with no GROUP BY

2005

Moving aggregates

Analytic functions


Pull values from other rows

2012



# The Stock Market Problem

TickerSymbol	TradeDate	ClosePrice
Z	2014-12-02	38.45
Z	2014-12-03	38.31
Z	2014-12-04	38.94
Z	2014-12-05	38.00
Z	2014-12-06	38.36
Z	2014-12-09	38.71



The diagram illustrates the daily price changes for stock Z. Curved arrows connect the closing prices of consecutive trading days, with the change value labeled to the right of each arrow.

Change
-0.14
0.63
-0.94
0.36
0.35

# Tools

Statistics IO

Execution Plans

Statistics Time

# Course Overview



Functions added in 2005 and 2012

Real world examples

Performance Tuning

Coming up next: The OVER Clause