

Pseudo-Constants in SQL

A photograph of a small brown teddy bear sitting alone on a dirt path in a lush green forest. The bear is positioned in the lower right quadrant of the frame, facing towards the left. The background is a dense, out-of-focus green, suggesting a forest or park setting. The overall mood is somewhat melancholic or contemplative.

@RileyMajor

Pseudo-Constant Candidates

3.1415926535

821480865144

288109757245

870066330572

703698336733

620005681271

420199561150

Infrequently
Changed

Frequently
Referenced

These digits are misleading.

http://en.wikipedia.org/wiki/Washington_Park_MAX_Station

They're everywhere...



- Sizes
- Order Statuses
- DEFCON Levels

Whole mess o' strings...

- So much data.
- Performance problems.
- Consistency Issues.
- Inflexible names.



Use Lookup Tables

- Less Space
- Better Performance
- Cleaner Data
- Numeric ID / Textual ID / Description



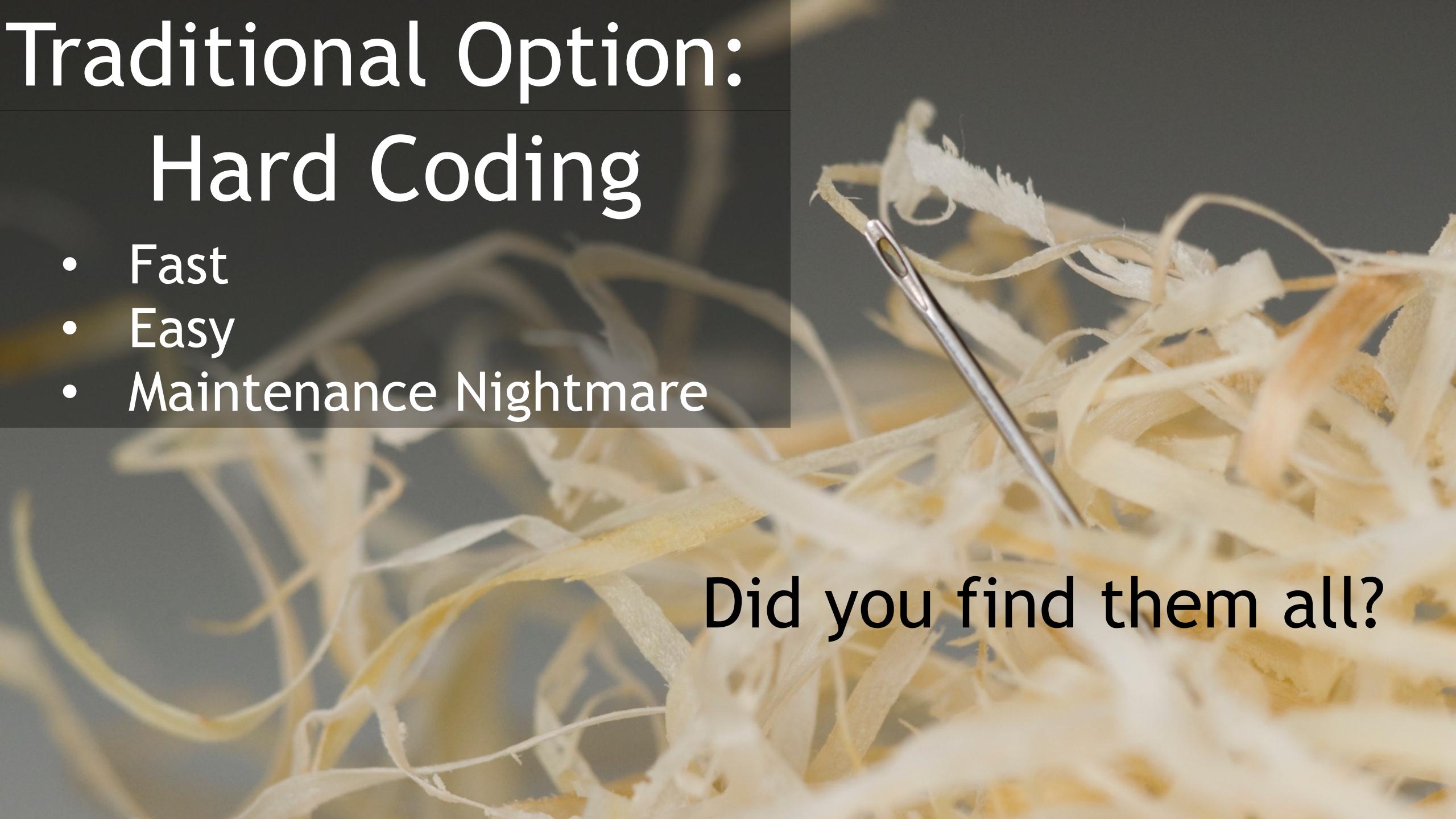
Magic Numbers

- Codes
- Enums
- Constants
- IDs



Traditional Option: Hard Coding

- Fast
- Easy
- Maintenance Nightmare

A close-up photograph showing a needle and thread being used to sew through a dense, tangled mess of yellowish threads or fibers. The needle is partially visible, and the thread is being pulled through the loops.

Did you find them all?

Better Option: JOINS to Lookup Tables

- Text Codes
- Slightly Slower
- More Complex Query Plans



Best Option: Pseudo-Constant Functions

- Fast
- Compiler Enforcement
- IntelliSense



A composite image featuring a person swimming in the ocean on the left and a seabird flying over the water on the right. The background shows a vast, calm sea under a clear blue sky.

Let's dive in...

Pseudo-Constants

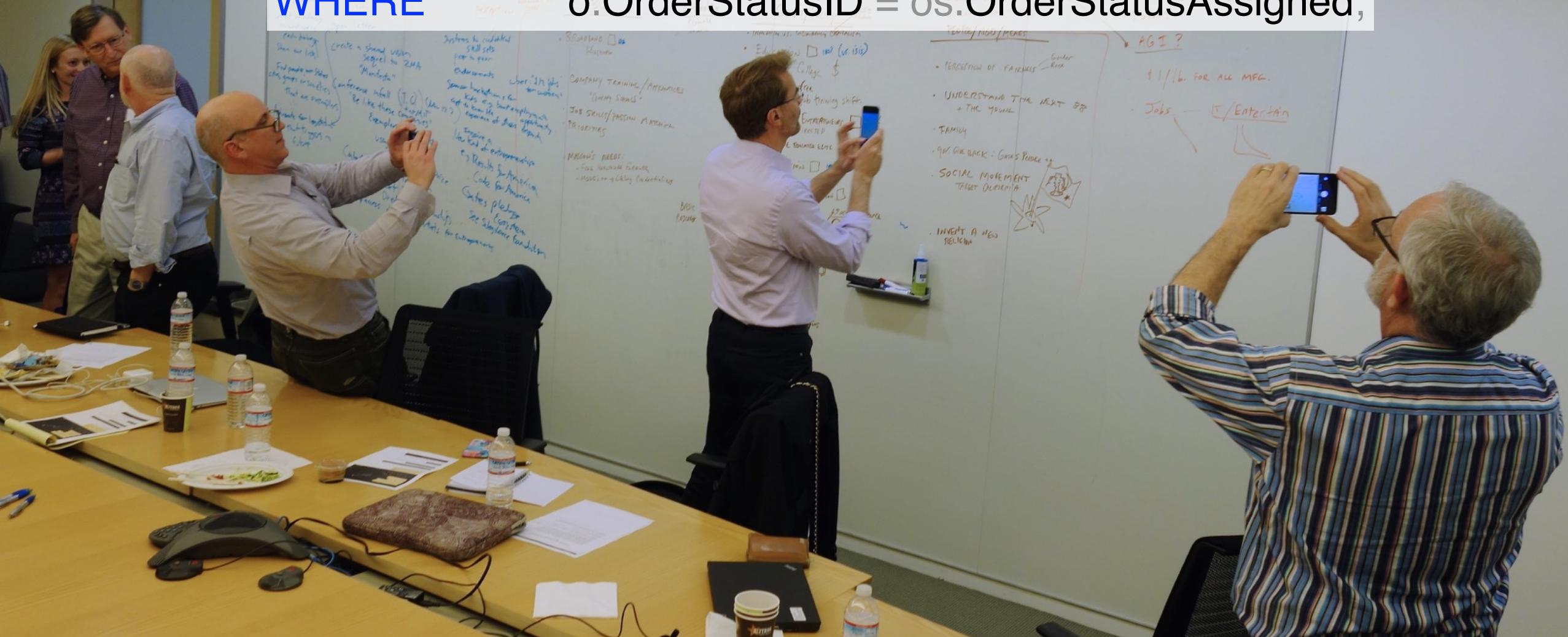


Inline Table-Valued
User Defined
Functions with a
Column Per Value

SELECT
FROM
CROSS JOIN
WHERE

*

dbo.CalcConstOrderStatuses() os
Orders AS o
o.OrderStatusID = os.OrderStatusAssigned;



A close-up photograph of a young girl's lower body. She is wearing a blue swimsuit with a white floral pattern. Her legs are covered in white lotion, which is being applied by a hand visible in the foreground. The background is a light-colored wall.

Apply Liberally

- Ad-Hoc SQL
- Stored Procedures
- Views
- User-Defined Functions
- Persisted Calculated Columns



Do not take with...

- Filtered Indexes
- Indexed Views
- OPTIMIZE FOR

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SQL Server User Group

Photo Credits

Day 187: Tilt-Shift Miniature Fake
Snugg LePup
<https://www.flickr.com/photos/snugglepup/3741073220>

Pi
Benjamin Chan
<https://www.flickr.com/photos/benchan/4771478057>

IMG_8549
Tantek Çelik
<https://www.flickr.com/photos/tantek/272706097>

yellow strings
M Glasgow
<https://www.flickr.com/photos/glasgows/117229470>

The Worlds Greatest Detective
Kit
<https://www.flickr.com/photos/practicalowl/1185217331>

No more rabbits?
Kristina Alexanderson
<https://www.flickr.com/photos/kalexanderson/6163134201>

Needle In A Haystack
t_buchtele
https://www.flickr.com/photos/t_buchtele/3422507814

DSP 87: Wagon Ride 2007-08-12
Vern Hart
<https://www.flickr.com/photos/vernhart/1143920492>

Very excited for cake
Sean Donohue
<https://www.flickr.com/photos/hermida/608166432>

Everybody's Diving at the Beach
Diana Robinson
<https://www.flickr.com/photos/dianasch/>

Photo Credits (continued)

Hollywood Studios - Frozen Gertie

Jeff Krause

<https://www.flickr.com/photos/jeffkrause/14730139972>

Reflections on the new Machine Age – technology,
inequality and the economy

Steve Jurvetson

<https://www.flickr.com/photos/jurvetson/16620787618>

apply liberally for best results

Ryan M. Follow

<https://www.flickr.com/photos/vancityscapes/2499792217>

pills

Dominique Godbout

<https://www.flickr.com/photos/dominiquegodbout/5180502739>

Additional References:

SQL Saturday Link:

<http://www.sqlsaturday.com/387/Sessions/Details.aspx?sid=21735>

Misleading Engraved Pi Digits

http://www.o4sr.org/publications/pf_v4n3/PiUnderground.htm

Wisconsin PASS Chapters:

FoxPASS - Appleton, WI

MADPASS - Madison, WI

Microsoft BI Professionals - Wisconsin: Greendale, WI

Western Wisconsin PASS - Altoona, WI

WI SSUG - Waukesha, WI