



# examples/output\_calc\_fields.pql

by *Pequel*

---

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## Output Calculated Fields Example Script

2.2



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## SCRIPT NAME

examples/output\_calc\_fields.pql

## DESCRIPTION

Demonstrate use of calculated output fields.

### 1. PROCESS DETAILS

Input records are read from standard input. The input record contains **8** fields. Fields are delimited by the '|' character.

Output records are written to standard output. The output record contains **11** fields. Fields are delimited by the '|' character.

Input stream is **sorted** by the input field **PRODUCT\_CODE** (*string*).

Input records are **grouped** by the input field **PRODUCT\_CODE** (*string*).

#### 1.1 PRODUCT\_CODE

Output Field

**Description**

Set to input field **PRODUCT\_CODE**

#### 1.2 MIN\_COST\_PRICE

Output Field

**Description**

**Min** aggregation on input field **COST\_PRICE**.

#### 1.3 MAX\_COST\_PRICE

Output Field

**Description**

**Max** aggregation on input field **COST\_PRICE**.

#### 1.5 SALES\_CODE\_1

Output Field

**Description**

**First** aggregation on input field **SALES\_CODE**.

**Aggregation condition**

\_DISTINCT\_SALES\_CODE == 1;

#### 1.6 SALES\_CODE\_2

Output Field

**Description**

**First** aggregation on input field **SALES\_CODE**.

**Aggregation condition**

\_DISTINCT\_SALES\_CODE == 2;

### 1.7 SALES\_CODE\_3

Output Field

**Description**

**First** aggregation on input field **SALES\_CODE**.

**Aggregation condition**

\_DISTINCT\_SALES\_CODE == 3;

### 1.8 SALES\_CODE\_4

Output Field

**Description**

**First** aggregation on input field **SALES\_CODE**.

**Aggregation condition**

\_DISTINCT\_SALES\_CODE == 4;

### 1.9 SALES\_CODE\_5

Output Field

**Description**

**First** aggregation on input field **SALES\_CODE**.

**Aggregation condition**

\_DISTINCT\_SALES\_CODE == 5;

### 1.10 COMMENT

Output Field

**Description**

Derived (calculated) field.

**Derived Field Evaluation**

### 1.11 COMMENT2

Output Field

**Description**

Derived (calculated) field.

**Derived Field Evaluation**

## 2. CONFIGURATION SETTINGS

### 2.1 *prefix*

directory pathname prefix.: examples

### 2.2 *pequeldoc*

generate pod / pdf pequel script Reference Guide.: pdf

### 2.3 *detail*

Include Pequel Generated Program chapter in Pequeldoc: 1

### 2.4 *script\_name*

script filename: examples/output\_calc\_fields.pql

### 2.5 *header*

write header record to output.: 1

### 2.6 *optimize*

optimize generated code.: 1

### 2.7 *doc\_title*

document title.: Output Calculated Fields Example Script

### 2.8 *doc\_email*

document email entry.: sample@youraddress.com

### 2.9 *doc\_version*

document version for pequel script.: 2.2

### 3. TABLES



## 4. TABLE INFORMATION SUMMARY

### 4.1 Table List Sorted By Table Name

## 5. EXAMPLES/OUTPUT\_CALC\_FIELDS.PQL

### *options*

```

prefix(examples)
pequeldoc(pdf)
detail(1)
script_name(examples/output_calc_fields.pql)
header(1)
optimize(1)
doc_title(Output Calculated Fields Example Script)
doc_email(sample@youraddress.com)
doc_version(2.2)

```

### *description*

Demonstrate use of calculated output fields.

### *input section*

```

PRODUCT_CODE
COST_PRICE
DESCRIPTION
SALES_CODE
SALES_PRICE
SALES_QTY
SALES_DATE
LOCATION

```

### *sort by*

```
PRODUCT_CODE string
```

### *group by*

```
PRODUCT_CODE string
```

### *output section*

string	PRODUCT_CODE	PRODUCT_CODE
numeric	MIN_COST_PRICE	min COST_PRICE
numeric	MAX_COST_PRICE	max COST_PRICE
numeric	_DISTINCT_SALES_CODE	distinct SALES_CODE
string	SALES_CODE_1	first SALES_CODE where _DISTINCT_SALES_CODE == 1
string	SALES_CODE_2	first SALES_CODE where _DISTINCT_SALES_CODE == 2
string	SALES_CODE_3	first SALES_CODE where _DISTINCT_SALES_CODE == 3
string	SALES_CODE_4	first SALES_CODE where _DISTINCT_SALES_CODE == 4
string	SALES_CODE_5	first SALES_CODE where _DISTINCT_SALES_CODE == 5
string	COMMENT	= _DISTINCT_SALES_CODE > 5 ? "Product has more than five sales codes" : "Product has "
string	COMMENT2	= "Product has " . (_DISTINCT_SALES_CODE > 5 ? "more than five" : _DISTINCT_SALES_CODE)

## 6. PEQUEL GENERATED PROGRAM

```
#!/usr/bin/perl
#-----
# vim: syntax=perl ts=4 sw=4
#-----
#Generated By: pequel Version 2.4-5, Build: Wednesday November 16 21:56:42 GMT 2005
#
#       : http://sourceforge.net/projects/pequel/
#Script Name : output_calc_fields.pql
#Created On  : Wed Nov 16 14:11:32 2005
#Perl Version: /usr/bin/perl 5.6.1 on solaris
#For        :
#-----
#Options:
#prefix(examples) directory pathname prefix.
#pequeldoc(pdf) generate pod / pdf pequel script Reference Guide.
#detail(1) Include Pequel Generated Program chapter in Pequeldoc
#script_name(examples/output_calc_fields.pql) script filename
#header(1) write header record to output.
#optimize(1) optimize generated code.
#doc_title(Output Calculated Fields Example Script) document title.
#doc_email(sample@youraddress.com) document email entry.
#doc_version(2.2) document version for pequel script.
#-----
use strict;
use constant _I_PRODUCT_CODE      => int    0;
use constant _I_COST_PRICE        => int    1;
use constant _I_DESCRIPTION       => int    2;
use constant _I_SALES_CODE        => int    3;
use constant _I_SALES_PRICE       => int    4;
use constant _I_SALES_QTY         => int    5;
use constant _I_SALES_DATE        => int    6;
use constant _I_LOCATION          => int    7;
use constant _O_PRODUCT_CODE      => int    1;
use constant _O_MIN_COST_PRICE    => int    2;
use constant _O_MAX_COST_PRICE    => int    3;
use constant _O_DISTINCT_SALES_CODE => int    4;
use constant _O_SALES_CODE_1      => int    5;
use constant _O_SALES_CODE_2      => int    6;
use constant _O_SALES_CODE_3      => int    7;
use constant _O_SALES_CODE_4      => int    8;
use constant _O_SALES_CODE_5      => int    9;
use constant _O_COMMENT           => int   10;
use constant _O_COMMENT2          => int   11;
local $\\="\\n";
local $,="|";
print STDERR '[examples/output_calc_fields.pql ' . localtime() . "] Init";
use constant VERBOSE => int 10000;
use constant LAST_ICELL => int 7;
my @I_VAL;
my @O_VAL;
my $_inprec=0;
my %DISTINCT;
my $key__I_PRODUCT_CODE;
my $previous_key__I_PRODUCT_CODE = undef;
foreach my $f (1..11) { $O_VAL[$f] = undef; }
# Sort:PRODUCT_CODE(asc:string)
open(DATA, q{cat - | sort -t'|' -y -k 1,1 2>/dev/null |}) || die "Cannot open input: $!";
&PrintHeader();
print STDERR '[examples/output_calc_fields.pql ' . localtime() . "] Start";
use Benchmark;
my $benchmark_start = new Benchmark;
while (<DATA>)
{
    ++$_inprec;
    print STDERR '[examples/output_calc_fields.pql ' . localtime() . "] $_inprec records." if ($_inprec % VER
RBOSE == 0);
    chomp;
    @I_VAL = split("[|]", $_);
    $key__I_PRODUCT_CODE = $I_VAL[_I_PRODUCT_CODE];
    if (!defined($previous_key__I_PRODUCT_CODE))
    {
        $previous_key__I_PRODUCT_CODE = $key__I_PRODUCT_CODE;
    }

    elsif ($previous_key__I_PRODUCT_CODE ne $key__I_PRODUCT_CODE)
    {
        $O_VAL[_O_COMMENT] = $O_VAL[_O_DISTINCT_SALES_CODE] > 5 ? "Product has more than five sales codes" :
"Product has " . $O_VAL[_O_DISTINCT_SALES_CODE] . " sales codes";
        $O_VAL[_O_COMMENT2] = "Product has " . ($O_VAL[_O_DISTINCT_SALES_CODE] > 5 ? "more than five" : $O_VA
L[_O_DISTINCT_SALES_CODE]) . " sales codes";
        print STDOUT

```

```

        $O_VAL[_O_PRODUCT_CODE],
        $O_VAL[_O_MIN_COST_PRICE],
        $O_VAL[_O_MAX_COST_PRICE],
        $O_VAL[_O_SALES_CODE_1],
        $O_VAL[_O_SALES_CODE_2],
        $O_VAL[_O_SALES_CODE_3],
        $O_VAL[_O_SALES_CODE_4],
        $O_VAL[_O_SALES_CODE_5],
        $O_VAL[_O_COMMENT],
        $O_VAL[_O_COMMENT2]
    ;
    $previous_key__I_PRODUCT_CODE = $key__I_PRODUCT_CODE;
    @O_VAL = undef;
    %DISTINCT = undef;
}

$O_VAL[_O_PRODUCT_CODE] = $I_VAL[_I_PRODUCT_CODE];
$O_VAL[_O_MIN_COST_PRICE] = $I_VAL[_I_COST_PRICE]
    if (!defined($O_VAL[_O_MIN_COST_PRICE]) || $I_VAL[_I_COST_PRICE] < $O_VAL[_O_MIN_COST_PRICE]);
$O_VAL[_O_MAX_COST_PRICE] = $I_VAL[_I_COST_PRICE]
    if (!defined($O_VAL[_O_MAX_COST_PRICE]) || $I_VAL[_I_COST_PRICE] > $O_VAL[_O_MAX_COST_PRICE]);
$O_VAL[_O__DISTINCT_SALES_CODE]++
    if (defined($I_VAL[_I_SALES_CODE]) && ++$DISTINCT{_O__DISTINCT_SALES_CODE}{qq{$I_VAL[_I_SALES_CODE]}}
== 1);

if ($O_VAL[_O__DISTINCT_SALES_CODE] == 1) {
    $O_VAL[_O_SALES_CODE_1] = $I_VAL[_I_SALES_CODE] if (!defined($O_VAL[_O_SALES_CODE_1]));
}
elseif ($O_VAL[_O__DISTINCT_SALES_CODE] == 2) {
    $O_VAL[_O_SALES_CODE_2] = $I_VAL[_I_SALES_CODE] if (!defined($O_VAL[_O_SALES_CODE_2]));
}
elseif ($O_VAL[_O__DISTINCT_SALES_CODE] == 3) {
    $O_VAL[_O_SALES_CODE_3] = $I_VAL[_I_SALES_CODE] if (!defined($O_VAL[_O_SALES_CODE_3]));
}
elseif ($O_VAL[_O__DISTINCT_SALES_CODE] == 4) {
    $O_VAL[_O_SALES_CODE_4] = $I_VAL[_I_SALES_CODE] if (!defined($O_VAL[_O_SALES_CODE_4]));
}
elseif ($O_VAL[_O__DISTINCT_SALES_CODE] == 5) {
    $O_VAL[_O_SALES_CODE_5] = $I_VAL[_I_SALES_CODE] if (!defined($O_VAL[_O_SALES_CODE_5]));
}
}

$O_VAL[_O_COMMENT] = $O_VAL[_O__DISTINCT_SALES_CODE] > 5 ? "Product has more than five sales codes" : "Product
has " . $O_VAL[_O__DISTINCT_SALES_CODE] . " sales codes";
$O_VAL[_O_COMMENT2] = "Product has " . ($O_VAL[_O__DISTINCT_SALES_CODE] > 5 ? "more than five" : $O_VAL[_O__DI
STINCT_SALES_CODE]) . " sales codes";
print STDOUT
    $O_VAL[_O_PRODUCT_CODE],
    $O_VAL[_O_MIN_COST_PRICE],
    $O_VAL[_O_MAX_COST_PRICE],
    $O_VAL[_O_SALES_CODE_1],
    $O_VAL[_O_SALES_CODE_2],
    $O_VAL[_O_SALES_CODE_3],
    $O_VAL[_O_SALES_CODE_4],
    $O_VAL[_O_SALES_CODE_5],
    $O_VAL[_O_COMMENT],
    $O_VAL[_O_COMMENT2]
;
close(DATA);
print STDERR '[examples/output_calc_fields.pql ' . localtime() . "] $inprec records.";
my $benchmark_end = new Benchmark;
my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
print STDERR '[examples/output_calc_fields.pql ' . localtime() . "] Code statistics: @{{timestr($benchmark_tim
ediff)}}";
#-+-+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
sub PrintHeader
{
    local $\="\n";
    local $,="|";
    print STDOUT
        'PRODUCT_CODE',
        'MIN_COST_PRICE',
        'MAX_COST_PRICE',
        'SALES_CODE_1',
        'SALES_CODE_2',
        'SALES_CODE_3',
        'SALES_CODE_4',
        'SALES_CODE_5',
        'COMMENT',
        'COMMENT2'
    ;
}

```

## 7. ABOUT PEQUEL

This document was generated by Pequel.

*<https://sourceforge.net/projects/pequel/>*

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