

# array\_fields.pql

by *Pequel*

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[sample@youraddress.com](mailto:sample@youraddress.com)

## Array Fields Example Script

2.2



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**SCRIPT NAME**

array\_fields.pql

**DESCRIPTION**

Demonstrates the use of array-fields. An array-field is denoted by the preceding '@' character. The 'salesman\_list' field in this example is an 'array field' delimited by the default array field delimiter ','. Array type macros (&arr\_...) will expect all arguments to be array-fields. Array macros can also be called as a method following the array-field.

**1. PROCESS DETAILS**

Input records are read from standard input. The input record contains **9** fields. Fields are delimited by the '|' character.

Output records are written to standard output. The output record contains **9** fields. Fields are delimited by the '|' character.

Input stream is **sorted** by the input field **product\_code** (*string*).

**1.1 location**

Output Field

*Description*

Set to input field **location**

**1.2 product\_code**

Output Field

*Description*

Set to input field **product\_code**

**1.3 salesman\_list**

Output Field

*Description*

Set to input field **salesman\_list**

**1.4 num\_salesmen**

Output Field

*Description*

Set to input field **num\_salesmen**

*Derived Input Field Evaluation*

=> &arr\_size(@salesman\_list)

**1.5 salesmen\_sorted**

Output Field

*Description*

Set to input field **salesmen\_sorted**

*Derived Input Field Evaluation*

```
=> &arr_sort(salesman_list)
```

### 1.6 salesmen\_sorted\_2

Output Field

**Description**

Set to input field **salesmen\_sorted\_2**

**Derived Input Field Evaluation**

```
=> @salesman_list->sort
```

### 1.7 salesmen\_uniq

Output Field

**Description**

Set to input field **salesmen\_uniq**

**Derived Input Field Evaluation**

```
=> &arr_values_uniq(@salesman_list)
```

### 1.8 salesmen\_uniq\_2

Output Field

**Description**

Set to input field **salesmen\_uniq\_2**

**Derived Input Field Evaluation**

```
=> @salesman_list->values_uniq
```

### 1.9 salesmen\_reverse

Output Field

**Description**

Set to input field **salesmen\_reverse**

**Derived Input Field Evaluation**

```
=> &arr_reverse(&arr_sort(@salesman_list))
```

## 2. CONFIGURATION SETTINGS

### 2.1 *pequeldoc*

generate pod / pdf pequel script Reference Guide.: pdf

### 2.2 *detail*

Include Pequel Generated Program chapter in Pequeldoc: 1

### 2.3 *script\_name*

script filename: array\_fields.pql

### 2.4 *header*

write header record to output.: 1

### 2.5 *optimize*

optimize generated code.: 1

### 2.6 *nulls*

print zero for null numeric/decimal.: 1

### 2.7 *doc\_title*

document title.: Array 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. ARRAY\_FIELDS.PQL

### *options*

```
pequeldoc(pdf)
detail(1)
script_name(array_fields.pql)
header(1)
optimize(1)
nulls(1)
doc_title(Array Fields Example Script)
doc_email(sample@youraddress.com)
doc_version(2.2)
```

### *description*

Demonstrates the use of array-fields. An array-field is denoted by the preceding '@' character. The 'salesman\_list' field in this example is an 'array field' delimited by the default array field delimiter ','. Array type macros (&arr\_...) will expect all arguments to be array-fields. Array macros can also be called as a method following the array-field.

### *sort by*

```
product_code string
```

### *input section*

```
product_code
cost_price
description
sales_code
sales_price
sales_qty
sales_date
location
salesman_list
num_salesmen => &arr_size(@salesman_list)

salesmen_sorted => &arr_sort(salesman_list)
salesmen_sorted_2 => @salesman_list->sort
salesmen_uniq => &arr_values_uniq(@salesman_list)
salesmen_uniq_2 => @salesman_list->values_uniq
salesmen_reverse => &arr_reverse(&arr_sort(@salesman_list))
```

### *output section*

string	location	location
string	product_code	product_code
string	salesman_list	salesman_list
numeric	num_salesmen	num_salesmen
string	salesmen_sorted	salesmen_sorted
string	salesmen_sorted_2	salesmen_sorted_2
string	salesmen_uniq	salesmen_uniq
string	salesmen_uniq_2	salesmen_uniq_2
string	salesmen_reverse	salesmen_reverse

## 6. PEQUEL GENERATED PROGRAM

```

# vim: syntax=perl ts=4 sw=4
#-----+
#Generated By: pequel Version 2.2-9, Build: Tuesday September 13 08:43:08 BST 2005
#           : https://sourceforge.net/projects/pequel/
#Script Name : array_fields.pql
#Created On  : Tue Sep 13 10:17:55 2005
#For         :
#-----+
#Options:
#pequeldoc(pdf) generate pod / pdf pequel script Reference Guide.
#detail(1) Include Pequel Generated Program chapter in Pequeldoc
#script_name(array_fields.pql) script filename
#header(1) write header record to output.
#optimize(1) optimize generated code.
#nulls(1) print zero for null numeric/decimal.
#ddoc_title(Array Fields Example Script) document title.
#doc_email(sample@youraddress.com) document email entry.
#doc_version(2.2) document version for pequel script.
#-----+
use strict;
local $\"=\n"; local $,="|";
print STDERR '[array_fields.pql ' . localtime() . "] Init";
use constant VERBOSE => int 10000;
use constant LAST_ICELL => int 14;
my @_I_VAL;
my @_O_VAL;
foreach my $f (1..9) { $O_VAL[$f] = undef; }
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 @_I_salesman_list    => int  8;
use constant @_I_num_salesmen    => int  9;
use constant @_I_salesmen_sorted  => int 10;
use constant @_I_salesmen_sorted_2 => int 11;
use constant @_I_salesmen_uniq    => int 12;
use constant @_I_salesmen_uniq_2  => int 13;
use constant @_I_salesmen_reverse => int 14;
use constant @_O_location         => int  1;
use constant @_O_product_code     => int  2;
use constant @_O_salesman_list    => int  3;
use constant @_O_num_salesmen    => int  4;
use constant @_O_salesmen_sorted  => int  5;
use constant @_O_salesmen_sorted_2 => int  6;
use constant @_O_salesmen_uniq    => int  7;
use constant @_O_salesmen_uniq_2  => int  8;
use constant @_O_salesmen_reverse => int  9;
open(DATA, q{cat - | sort -t'| -y -k 1,1 |}) || die "Cannot open input: $!";
&PrintHeader();
print STDERR '[array_fields.pql ' . localtime() . "] Start";
use Benchmark;
my $benchmark_start = new Benchmark;
while (<DATA>)
{
    print STDERR '[array_fields.pql ' . localtime() . "] $. records." if ($. % VERBOSE == 0);
    chomp;
    @_I_VAL = split("[ ]", $_);
    $O_VAL[@_O_location] = @_I_VAL[@_I_location];
    $O_VAL[@_O_product_code] = @_I_VAL[@_I_product_code];
    $O_VAL[@_O_salesman_list] = @_I_VAL[@_I_salesman_list];
    @_I_VAL[@_I_num_salesmen] = int(split(/\s*,\s*/,$I_VAL[@_I_salesman_list],-1));
    $O_VAL[@_O_num_salesmen] = @_I_VAL[@_I_num_salesmen];
    @_I_VAL[@_I_salesmen_sorted] = join(',', sort(split(/\s*,\s*/,$I_VAL[@_I_salesman_list],-1)));
    $O_VAL[@_O_salesmen_sorted] = @_I_VAL[@_I_salesmen_sorted];
    @_I_VAL[@_I_salesmen_sorted_2] = join(',', sort(split(/\s*,\s*/,$I_VAL[@_I_salesman_list],-1)));
    $O_VAL[@_O_salesmen_sorted_2] = @_I_VAL[@_I_salesmen_sorted_2];
    @_I_VAL[@_I_salesmen_uniq] = &{sub { my %uniq; foreach (split(/\s*,\s*/,$I_VAL[@_I_salesman_list],-1)) { $uniq{$_}++; } return join(',', keys %uniq); }};
    $O_VAL[@_O_salesmen_uniq] = @_I_VAL[@_I_salesmen_uniq];
    @_I_VAL[@_I_salesmen_uniq_2] = &{sub { my %uniq; foreach (split(/\s*,\s*/,$I_VAL[@_I_salesman_list],-1)) { $uniq{$_}++; } return join(',', keys %uniq); }};
    $O_VAL[@_O_salesmen_uniq_2] = @_I_VAL[@_I_salesmen_uniq_2];
    @_I_VAL[@_I_salesmen_reverse] = join(',', reverse(split(/\s*,\s*/,join(',', sort(split(/\s*,\s*/,$I_VAL[@_I_salesman_list],-1))),-1)));
    $O_VAL[@_O_salesmen_reverse] = @_I_VAL[@_I_salesmen_reverse];
    print

```



## 7. ABOUT PEQUEL

This document was generated by Pequel.

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

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