examples/sales_ttl_by_loc.pql by *Pequel*

sample@youraddress.com

Pequel Table Example Script

2.3

Table of Contents
Pequel Table Example Script

SCRIPT NAME

examples/sales_ttl_by_loc.pql

DESCRIPTION

This script demonstrates the use of pequel tables. This scipt will be called by another Pequel script to load the table data via the 'load pequel table' section. The important thing here is to specify the 'input_file' option.

1. PROCESS DETAILS

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

Output records are written to standard output. The output record contains **3** fields. Fields are delimited by the '|' character.

Input records are **grouped** by the input field *LOCATION* (*string*).

1.1 *LOCATION*

Output Field

Description
Set to input field *LOCATION*

1.2 *SALES_TOTAL*

Output Field

Description
Sum aggregation on input field *SALES_TOTAL*.

1.3 *TOP_PRODUCT*

Output Field

Description
Set to input field *TOP_PRODUCT*

Derived Input Field Evaluation

```
=> %TTOPPRODBYLOC(LOCATION)->PRODUCT_CODE
```

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/sales_ttl_by_loc.pql

2.5 *input_file*
   input data filename: sample.data

2.6 *header*
   write header record to output.: 1

2.7 *optimize*
   optimize generated code.: 1

2.8 *hash*
   Generate in memory. Input data can be unsorted.: 1

2.9 *doc_title*
   document title.: Pequel Table Example Script

2.10 *doc_email*
   document email entry.: sample@youraddress.com

2.11 *doc_version*
   document version for pequel script.: 2.3

3. TABLES

3.1 *TTOPPRODBYLOC*
Table Type: ***external***
Data Source Filename: ***examples/top_prod_by_loc.pql***
Key Field Number: *1*

3.1.1 *PRODUCT_CODE = 2*

4. TABLE INFORMATION SUMMARY

4.1 Table List Sorted By Table Name
     TTOPPRODBYLOC — *1* (*external*)

5. EXAMPLES/SALES_TTL_BY_LOC.PQL

options

```
prefix(examples)
pequeldoc(pdf)
detail(1)
script_name(examples/sales_ttl_by_loc.pql)
input_file(sample.data)
header(1)
optimize(1)
hash(1)
doc_title(Pequel Table Example Script)
doc_email(sample@youraddress.com)
doc_version(2.3)
```

description

```
This script demonstrates the use of pequel tables. This scipt will be
called by another Pequel script to load the table data
via the 'load pequel table'
section. The important thing here is to specify the 'input_file' option.
```

load table

```
TTOPPRODBYLOC /* Table Name */ \
    examples/top_prod_by_loc.pql /* Data Source Filename */ \
    1 /* Key Column Number */ \
     \
    PRODUCT_CODE = 2
```

input section

```
PRODUCT_CODE
COST_PRICE
DESCRIPTION
SALES_CODE
SALES_PRICE
SALES_QTY
SALES_DATE
LOCATION
SALES_TOTAL => SALES_QTY * SALES_PRICE

TOP_PRODUCT => %TTOPPRODBYLOC(LOCATION)->PRODUCT_CODE
```

group by

```
LOCATION string
```

output section

```
string    LOCATION    LOCATION
decimal   SALES_TOTAL sum SALES_TOTAL
string    TOP_PRODUCT TOP_PRODUCT
```

6. PEQUEL GENERATED PROGRAM

```perl
#!/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 : sales_ttl_by_loc.pql
#Created On  : Wed Nov 16 14:19:24 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/sales_ttl_by_loc.pql) script filename
#input_file(sample.data) input data filename
#header(1) write header record to output.
#optimize(1) optimize generated code.
#hash(1) Generate in memory. Input data can be unsorted.
#doc_title(Pequel Table Example Script) document title.
#doc_email(sample@youraddress.com) document email entry.
#doc_version(2.3) 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 _I_SALES_TOTAL     => int   8;
use constant _I_TOP_PRODUCT     => int   9;
use constant _O_LOCATION        => int   1;
use constant _O_SALES_TOTAL     => int   2;
use constant _O_TOP_PRODUCT     => int   3;
use constant _T_TTOPPRODBYLOC_FLD_PRODUCT_CODE   => int    0;
use constant _I_TTOPPRODBYLOC_LOCATION_FLD_KEY          => int  10;
use constant _I_TTOPPRODBYLOC_LOCATION_FLD_PRODUCT_CODE => int  11;
local $\="\n";
local $,="|";
print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] Init";
use constant VERBOSE => int 10000;
use constant LAST_ICELL => int 9;
my @I_VAL;
my %O_VAL;
my $key;
my $_inprecs=0;
my $_TABLE_TTOPPRODBYLOC = &LoadTableTTOPPRODBYLOC; # ref to %$TTOPPRODBYLOC hash
open(DATA, q{examples/sample.data})|| die "Cannot open examples/sample.data: $!";
&PrintHeader();
print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] Start";
use Benchmark;
my $benchmark_start = new Benchmark;
while (<DATA>)
{
    ++$_inprecs;
    print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] $_inprecs records." if ($_inprecs % VERB
OSE == 0);
    chomp;
    @I_VAL = split("[|]", $_);
    $key = ( $I_VAL[_I_LOCATION] );
    $O_VAL{$key}{_O_LOCATION} = $I_VAL[_I_LOCATION];
    $I_VAL[_I_SALES_TOTAL] = $I_VAL[_I_SALES_QTY] * $I_VAL[_I_SALES_PRICE];
    $O_VAL{$key}{_O_SALES_TOTAL} += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
    $I_VAL[_I_TOP_PRODUCT] = $$_TABLE_TTOPPRODBYLOC{qq{$I_VAL[_I_LOCATION]}};
    $O_VAL{$key}{_O_TOP_PRODUCT} = $I_VAL[_I_TOP_PRODUCT];
}

foreach $key (sort  keys %O_VAL)
{
    print STDOUT
        $O_VAL{$key}{_O_LOCATION},
        $O_VAL{$key}{_O_SALES_TOTAL},
        $O_VAL{$key}{_O_TOP_PRODUCT}
    ;
}
```

```perl
#Script Name : sales_ttl_by_loc.pql
```

```perl
        close(DATA);
        print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] $_inprecs records.";
        my $benchmark_end = new Benchmark;
        my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
        print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] Code statistics: @{[timestr($benchmark_timed
iff)]}";
#-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
#+++++++ Table TTOPPRODBYLOC --> Type :ETL::Pequel::Type::Table::External::Pequel +++++++
sub LoadTableTTOPPRODBYLOC
{
    my %_TABLE_TTOPPRODBYLOC;
    print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] Loading table TTOPPRODBYLOC from example
s/top_prod_by_loc.pql...";
    my $pid = open(TTOPPRODBYLOC, '-|'); # Fork
    my $count=0;
    if ($pid) # Parent
    {
        while (<TTOPPRODBYLOC>)
        {
            chomp;
            my (@flds) = split("[|]", $_, -1);
            $_TABLE_TTOPPRODBYLOC{$flds[0]} = $flds[ 1 ];
            print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] Table TTOPPRODBYLOC $. records..
." if ($. % 100000 == 0);
        }

        $count=$.;
        close(TTOPPRODBYLOC);
    }

    else # Child
    {
        &p_LoadTableTTOPPRODBYLOC::LoadTableTTOPPRODBYLOC;
        exit(0);
    }

    print STDERR '[examples/sales_ttl_by_loc.pql ' . localtime() . "] Table TTOPPRODBYLOC loaded $count record
s.";
    close(TTOPPRODBYLOC);
    return \%_TABLE_TTOPPRODBYLOC;
}


{
    package p_LoadTableTTOPPRODBYLOC;
    sub LoadTableTTOPPRODBYLOC
    {
#    !/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 : top_prod_by_loc.pql
#    Created On  : Wed Nov 16 14:19:23 2005
#    Perl Version: /usr/bin/perl 5.6.1 on solaris
#    For         :
#-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
#    Options:
#        input_file(sample.data) input data filename
#        header(1) write header record to output.
#        optimize(1) optimize generated code.
#        hash(1) Generate in memory. Input data can be unsorted.
#        doc_title(Pequel Table Example Script) document title.
#        doc_email(sample@youraddress.com) document email entry.
#        doc_version(2.3) 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 _I_SALES_TOTAL     => int    8;
        use constant _O_LOCATION        => int    1;
        use constant _O__MAXSALES       => int    2;
        use constant _O_PRODUCT_CODE    => int    3;
        local $\="\n";
        local $,="|";
        print STDERR '[examples/top_prod_by_loc.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 8;
        my @I_VAL;
```

```perl
        my %O_VAL;
        my $key;
        my $_inprecs=0;
        open(DATA, q{examples/sample.data})|| die "Cannot open examples/sample.data: $!";
        &PrintHeader();
        print STDERR '[examples/top_prod_by_loc.pql ' . localtime() . "] Start";
        use Benchmark;
        my $benchmark_start = new Benchmark;
        while (<DATA>)
        {
            ++$_inprecs;
            print STDERR '[examples/top_prod_by_loc.pql ' . localtime() . "] $_inprecs records." if ($_inprecs
 % VERBOSE == 0);
            chomp;
            @I_VAL = split("[|]", $_);
            $key = ( $I_VAL[_I_LOCATION] );
            $O_VAL{$key}{_O_LOCATION} = $I_VAL[_I_LOCATION];
            $I_VAL[_I_SALES_TOTAL] = $I_VAL[_I_SALES_QTY] * $I_VAL[_I_SALES_PRICE];
            $O_VAL{$key}{_O__MAXSALES} = $I_VAL[_I_SALES_TOTAL]
                if (!defined($O_VAL{$key}{_O__MAXSALES}) || $I_VAL[_I_SALES_TOTAL] > $O_VAL{$key}{_O__MAXSALES
});

            if (sprintf("%.2f",$I_VAL[_I_SALES_TOTAL]) eq sprintf("%.2f",$O_VAL{$key}{_O__MAXSALES})) {
                $O_VAL{$key}{_O_PRODUCT_CODE} = $I_VAL[_I_PRODUCT_CODE] if (!defined($O_VAL{$key}{_O_PRODUCT_C
ODE}));
            }
        }

        foreach $key (sort  keys %O_VAL)
        {
            print STDOUT
                $O_VAL{$key}{_O_LOCATION},
                $O_VAL{$key}{_O_PRODUCT_CODE}
            ;
        }

        close(DATA);
        print STDERR '[examples/top_prod_by_loc.pql ' . localtime() . "] $_inprecs records.";
        my $benchmark_end = new Benchmark;
        my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
        print STDERR '[examples/top_prod_by_loc.pql ' . localtime() . "] Code statistics: @{[timestr($benchmar
k_timediff)]}";
#-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
        sub PrintHeader
        {
            local $\="\n";
            local $,="|";
            print STDOUT
                'LOCATION',
                'PRODUCT_CODE'
                ;
        }

    }

}

sub PrintHeader
{
    local $\="\n";
    local $,="|";
    print STDOUT
        'LOCATION',
        'SALES_TOTAL',
        'TOP_PRODUCT'
        ;
}
```

7. ABOUT PEQUEL

This document was generated by Pequel.

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