



examples/copy_output.pql

by *Pequel*

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Copy Output Record Example Script

2.3

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Copy Output Record Example Script

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SCRIPT NAME

examples/copy_output.pql

DESCRIPTION

1. PROCESS DETAILS

Input records are read from chain_pequel_pt1.pql. The input record contains **3** 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 stream is **sorted** by the input field **LOCATION** (*string*).

Input records are eliminated (**filtered**) unless **LOCATION** eq 'WA' || **LOCATION** eq 'SA' || **LOCATION** eq 'NSW' || **LOCATION** eq 'VIC' || **LOCATION** eq 'NT'.

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

Output aggregated records are eliminated unless **having SALES_TOTAL** 0.

1.1 LOCATION

Output Field

Description

Set to input field **LOCATION_DESC**

Derived Input Field Evaluation

=> %LOC_DESCRIPTOR(LOCATION)

1.2 DESCRIPTION

Output Field

Description

Set to input field **DESCRIPTION**

Derived Input Field Evaluation

=> 'State Total'

1.3 SALES_TOTAL

Output Field

Description

Sum aggregation on input field **SALES_TOTAL**.

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 *prefix*

directory pathname prefix.: examples

2.4 *script_name*

script filename: examples/copy_output.pql

2.5 *input_file*

input data filename: chain_pequel_pt1.pql

2.6 *optimize*

optimize generated code.: 1

2.7 *doc_title*

document title.: Copy Output Record Example Script

2.8 *doc_email*

document email entry.: sample@youraddress.com

2.9 *doc_version*

document version for pequel script.: 2.3

3. TABLES

3.1 *LOC_DESCRIPT*

Table Type: *local*

Data

NSW — New South Wales

WA — Western Australia

SA — South Australia

NT — Northern Territory

QLD — Queensland

VIC — Victoria

4. TABLE INFORMATION SUMMARY

4.1 Table List Sorted By Table Name

LOC_DESCRIPT — 1 (*local*)

5. EXAMPLES/COPY_OUTPUT.PQL

options

```
pequeldoc(pdf)
detail(1)
prefix(examples)
script_name(examples/copy_output.pql)
input_file(chain_pequel_pt1.pql)
optimize(1)
doc_title(Copy Output Record Example Script)
doc_email(sample@youraddress.com)
doc_version(2.3)
```

init table

```
LOC_DESCRIPTOR NSW New South Wales
LOC_DESCRIPTOR WA Western Australia
LOC_DESCRIPTOR SA South Australia
LOC_DESCRIPTOR NT Northern Territory
LOC_DESCRIPTOR QLD Queensland
LOC_DESCRIPTOR VIC Victoria
```

input section

```
LOCATION
PRODUCT_CODE
SALES_TOTAL
LOCATION_DESC => %LOC_DESCRIPTOR(LOCATION)

DESCRIPTION => 'State Total'
```

divert record(pequel:copy_output_WA.pql)

```
LOCATION eq 'WA'
```

divert record(pequel:copy_output_SA.pql)

```
LOCATION eq 'SA'
```

divert record(pequel:copy_output_NSW.pql)

```
LOCATION eq 'NSW'
```

divert record(pequel:copy_output_VIC.pql)

```
LOCATION eq 'VIC'
```

divert record(pequel:copy_output_NT.pql)

```
LOCATION eq 'NT'
```

filter

```
LOCATION eq 'WA' || LOCATION eq 'SA' || LOCATION eq 'NSW' || LOCATION eq 'VIC' || LOCATION eq 'NT'
```

sort by

```
LOCATION string
```

group by

```
LOCATION string
```

output section

```
string    LOCATION    LOCATION_DESC
string    DESCRIPTION DESCRIPTION
decimal   SALES_TOTAL sum SALES_TOTAL
```

having

```
SALES_TOTAL > 0
```

sort output

```
LOCATION string  
SALES_TOTAL numeric des
```

6. PEQUEL GENERATED PROGRAM

```
# vim: syntax=perl ts=4 sw=4
#-----
#Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
#           : https://sourceforge.net/projects/pequel/
#Script Name : examples/copy_output.pql
#Created On  : Thu Oct 13 15:46:21 2005
#For         :
#-----
#Options:
#pequeldoc(pdf) generate pod / pdf pequel script Reference Guide.
#detail(1) Include Pequel Generated Program chapter in Pequeldoc
#prefix(examples) directory pathname prefix.
#script_name(examples/copy_output.pql) script filename
#input_file(chain_pequel_pt1.pql) input data filename
#optimize(1) optimize generated code.
#doc_title(Copy Output Record Example Script) document title.
#doc_email(sample@youraddress.com) document email entry.
#doc_version(2.3) document version for pequel script.
#-----
use strict;
use Fcntl ':flock';
use constant _I_LOCATION      => int    0;
use constant _I_PRODUCT_CODE => int    1;
use constant _I_SALES_TOTAL  => int    2;
use constant _I_LOCATION_DESC => int    3;
use constant _I_DESCRIPTION   => int    4;
use constant _O_LOCATION      => int    1;
use constant _O_DESCRIPTION   => int    2;
use constant _O_SALES_TOTAL   => int    3;
use constant _T_LOC_DESCRIPT_FLD_1 => int    0;
use constant _I_LOC_DESCRIPT_LOCATION_FLD_KEY => int    5;
use constant _I_LOC_DESCRIPT_LOCATION_FLD_1 => int    6;
local $\\="\\n"; local $,="|";
print STDERR '[examples/copy_output.pql ' . localtime() . "] Init";
use constant VERBOSE => int 10000;
use constant LAST_ICELL => int 4;
my @I_VAL;
my @O_VAL;
my $key__I_LOCATION;
my $previous_key__I_LOCATION = undef;
foreach my $f (1..3) { $O_VAL[$f] = undef; }
my $TABLE_LOC_DESCRIPT = &InitLookupLOC_DESCRIPT; # ref to %$LOC_DESCRIPT hash
if (open(INPUT_CHAIN_PEQUEL_PT1, '-|') == 0) # Fork -- read from child
{
    &p_input_chain_pequel_pt1::input_chain_pequel_pt1;
    exit(0);
}

open(STDOUT, '|-', q{sort -t'|' -y -k 1,1 -k 3nr,3nr 2>/dev/null |});
if (open(DIVERT_INPUT_COPY_OUTPUT_WA, '|-') == 0) # Fork -- write to child
{
    &p_divert_input_copy_output_wa::divert_input_copy_output_wa;
    exit(0);
}

if (open(DIVERT_INPUT_COPY_OUTPUT_SA, '|-') == 0) # Fork -- write to child
{
    &p_divert_input_copy_output_sa::divert_input_copy_output_sa;
    exit(0);
}

if (open(DIVERT_INPUT_COPY_OUTPUT_NSW, '|-') == 0) # Fork -- write to child
{
    &p_divert_input_copy_output_nsw::divert_input_copy_output_nsw;
    exit(0);
}

if (open(DIVERT_INPUT_COPY_OUTPUT_VIC, '|-') == 0) # Fork -- write to child
{
    &p_divert_input_copy_output_vic::divert_input_copy_output_vic;
    exit(0);
}

if (open(DIVERT_INPUT_COPY_OUTPUT_NT, '|-') == 0) # Fork -- write to child
{
    &p_divert_input_copy_output_nt::divert_input_copy_output_nt;
    exit(0);
}

print STDERR '[examples/copy_output.pql ' . localtime() . "] Start";
```

```

use Benchmark;
my $benchmark_start = new Benchmark;
while (<INPUT_CHAIN_PEQUEL_PT1>)
{
    print STDERR "[examples/copy_output.pql ' . localtime() . "] $. records." if ($. % VERBOSE == 0);
    chomp;
    @I_VAL = split("[|]", $_);
    next unless ($I_VAL[_I_LOCATION] eq 'WA' || $I_VAL[_I_LOCATION] eq 'SA' || $I_VAL[_I_LOCATION] eq 'NSW' ||
$I_VAL[_I_LOCATION] eq 'VIC' || $I_VAL[_I_LOCATION] eq 'NT');
    if ($I_VAL[_I_LOCATION] eq 'WA')
    {
        print DIVERT_INPUT_COPY_OUTPUT_WA
            @I_VAL[0..LAST_ICELL];
        next;
    }

    if ($I_VAL[_I_LOCATION] eq 'SA')
    {
        print DIVERT_INPUT_COPY_OUTPUT_SA
            @I_VAL[0..LAST_ICELL];
        next;
    }

    if ($I_VAL[_I_LOCATION] eq 'NSW')
    {
        print DIVERT_INPUT_COPY_OUTPUT_NSW
            @I_VAL[0..LAST_ICELL];
        next;
    }

    if ($I_VAL[_I_LOCATION] eq 'VIC')
    {
        print DIVERT_INPUT_COPY_OUTPUT_VIC
            @I_VAL[0..LAST_ICELL];
        next;
    }

    if ($I_VAL[_I_LOCATION] eq 'NT')
    {
        print DIVERT_INPUT_COPY_OUTPUT_NT
            @I_VAL[0..LAST_ICELL];
        next;
    }

    $key__I_LOCATION = $I_VAL[_I_LOCATION];
    if (!defined($previous_key__I_LOCATION))
    {
        $previous_key__I_LOCATION = $key__I_LOCATION;
    }

    elsif ($previous_key__I_LOCATION ne $key__I_LOCATION)
    {
        flock(STDOUT, LOCK_EX);
        print STDOUT
            $O_VAL[_O_LOCATION],
            $O_VAL[_O_DESCRIPTION],
            $O_VAL[_O_SALES_TOTAL]
        if
        (
            $O_VAL[_O_SALES_TOTAL] > 0
        );
        flock(STDOUT, LOCK_UN);
        $previous_key__I_LOCATION = $key__I_LOCATION;
        @O_VAL = undef;
    }

    $I_VAL[_I_LOCATION_DESC] = $$TABLE_LOC_DESCRIPTOR{qq{$I_VAL[_I_LOCATION]}};
    $O_VAL[_O_LOCATION] = $I_VAL[_I_LOCATION_DESC];
    $I_VAL[_I_DESCRIPTION] = 'State Total';
    $O_VAL[_O_DESCRIPTION] = $I_VAL[_I_DESCRIPTION];
    $O_VAL[_O_SALES_TOTAL] += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
}

flock(STDOUT, LOCK_EX);
print STDOUT
    $O_VAL[_O_LOCATION],
    $O_VAL[_O_DESCRIPTION],
    $O_VAL[_O_SALES_TOTAL]
if
(
    $O_VAL[_O_SALES_TOTAL] > 0
);
flock(STDOUT, LOCK_UN);
close(DIVERT_INPUT_COPY_OUTPUT_NT);
close(DIVERT_INPUT_COPY_OUTPUT_VIC);

```

```

close(DIVERT_INPUT_COPY_OUTPUT_NSW);
close(DIVERT_INPUT_COPY_OUTPUT_SA);
close(DIVERT_INPUT_COPY_OUTPUT_WA);
close(STDOUT);
print STDERR '[examples/copy_output.pql ' . localtime() . "] $. records.";
my $benchmark_end = new Benchmark;
my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
print STDERR '[examples/copy_output.pql ' . localtime() . "] Code statistics: @([timestr($benchmark_timediff))
]";
#-----
##### Table LOC_DESCRIPTOR --> Type :Pequel::Type::Table::Local #####
sub InitLookupLOC_DESCRIPTOR
{
    my %_TABLE_LOC_DESCRIPTOR;
    %_TABLE_LOC_DESCRIPTOR =
    (
        'NSW' => 'New South Wales',
        'NT' => 'Northern Territory',
        'QLD' => 'Queensland',
        'SA' => 'South Australia',
        'VIC' => 'Victoria',
        'WA' => 'Western Australia'
    );
    return \%_TABLE_LOC_DESCRIPTOR;
}

{
    package p_input_chain_pequel_pt1;
    sub input_chain_pequel_pt1
    {
        # vim: syntax=perl ts=4 sw=4
#-----
# Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
# : https://sourceforge.net/projects/pequel/
# Script Name : examples/chain_pequel_pt1.pql
# Created On : Thu Oct 13 15:46:22 2005
# For :
#-----
# Options:
# input_file(sample.data) input data filename
# optimize(1) optimize generated code.
# hash(1) Generate in memory. Input data can be unsorted.
# doc_title(Pequel Chaining Part-1 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_PRODUCT_CODE => int 2;
        use constant _O_SALES_TOTAL => int 3;
        local $\\="\\n"; local $,="|";
        print STDERR '[examples/chain_pequel_pt1.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 8;
        my @I_VAL;
        my %O_VAL;
        my $key;
        open(DATA, q{examples/sample.data}) || die "Cannot open examples/sample.data: $!";
        open(STDOUT, '|-', q{sort -t'|' -y -k 1,1 2>/dev/null |});
        print STDERR '[examples/chain_pequel_pt1.pql ' . localtime() . "] Start";
        use Benchmark;
        my $benchmark_start = new Benchmark;
        while (<DATA>)
        {
            print STDERR '[examples/chain_pequel_pt1.pql ' . localtime() . "] $. records." if ($. % VERBOSE ==
0);
            chomp;
            @I_VAL = split("[|]", $_);
            $key = ( $I_VAL[_I_LOCATION] ) . '|' . ( $I_VAL[_I_PRODUCT_CODE] );
            $O_VAL{$key}{_O_LOCATION} = $I_VAL[_I_LOCATION];
            $O_VAL{$key}{_O_PRODUCT_CODE} = $I_VAL[_I_PRODUCT_CODE];
            $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 '');
        }

        foreach $key (sort keys %O_VAL)

```

```

    {
        print STDOUT
        $O_VAL{$key}{_O_LOCATION},
        $O_VAL{$key}{_O_PRODUCT_CODE},
        $O_VAL{$key}{_O_SALES_TOTAL}
    }

    ;

    }

    close(STDOUT);
    print STDERR '[examples/chain_pequel_ptl.pql ' . localtime() . "] $. records.";
    my $benchmark_end = new Benchmark;
    my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
    print STDERR '[examples/chain_pequel_ptl.pql ' . localtime() . "] Code statistics: @{{timestr($benchma
rk_timediff)}}";
#-----
}

}

{
    package p_divert_input_copy_output_sa;
    sub divert_input_copy_output_sa
    {
        # vim: syntax=perl ts=4 sw=4
#-----
#   Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
#   : https://sourceforge.net/projects/pequel/
#   Script Name : examples/copy_output_SA.pql
#   Created On  : Thu Oct 13 15:46:27 2005
#   For         :
#-----
#   Options:
#       optimize(1) optimize generated code.
#       doc_title(Copy Output Record Example Script) document title.
#       doc_email(sample@youraddress.com) document email entry.
#       doc_version(2.3) document version for pequel script.
#-----
        use strict;
        use Fcntl ':flock';
        use constant _I_LOCATION          => int    0;
        use constant _I_PRODUCT_CODE      => int    1;
        use constant _I_SALES_TOTAL       => int    2;
        use constant _I_LOCATION_NAME     => int    3;
        use constant _O_LOCATION_NAME     => int    1;
        use constant _O_PRODUCT_CODE      => int    2;
        use constant _O_SALES_TOTAL       => int    3;
        local $\\="\\n"; local $,="|";
        print STDERR '[examples/copy_output_SA.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 3;
        my @I_VAL;
        my @O_VAL;
        my $key__I_PRODUCT_CODE;
        my $previous_key__I_PRODUCT_CODE = undef;
        foreach my $f (1..3) { $O_VAL[$f] = undef; }
#   Sort:PRODUCT_CODE(asc:string)
        open(DATA, q{cat - | sort -t'|' -y -k 2,2 2>/dev/null |}) || die "Cannot open input: $!";
        if (open(COPY_OUTPUT_COPY_OUTPUT_COMBINER, '|-') == 0) # Fork -- write to child
        {
            &p_copy_output_copy_output_combiner::copy_output_copy_output_combiner;
            exit(0);
        }

        print STDERR '[examples/copy_output_SA.pql ' . localtime() . "] Start";
        use Benchmark;
        my $benchmark_start = new Benchmark;
        while (<DATA>)
        {
            print STDERR '[examples/copy_output_SA.pql ' . localtime() . "] $. records." if ($. % VERBOSE == 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)
            {
                flock(STDOUT, LOCK_EX);
                print STDOUT
                    $O_VAL[_O_LOCATION_NAME],
                    $O_VAL[_O_PRODUCT_CODE],
                    $O_VAL[_O_SALES_TOTAL]

```

```

;
flock(STDOUT, LOCK_UN);
if ($O_VAL[_O_SALES_TOTAL] > 0)
{
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
    print COPY_OUTPUT_COPY_OUTPUT_COMBINER
        $O_VAL[_O_LOCATION_NAME],
        $O_VAL[_O_PRODUCT_CODE],
        $O_VAL[_O_SALES_TOTAL]
    ;
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
}

$previous_key__I_PRODUCT_CODE = $key__I_PRODUCT_CODE;
@O_VAL = undef;
}

$I_VAL[_I_LOCATION_NAME] = 'South Australia';
$O_VAL[_O_LOCATION_NAME] = $I_VAL[_I_LOCATION_NAME];
$O_VAL[_O_PRODUCT_CODE] = $I_VAL[_I_PRODUCT_CODE];
$O_VAL[_O_SALES_TOTAL] += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
}

flock(STDOUT, LOCK_EX);
print STDOUT
    $O_VAL[_O_LOCATION_NAME],
    $O_VAL[_O_PRODUCT_CODE],
    $O_VAL[_O_SALES_TOTAL]
;
flock(STDOUT, LOCK_UN);
if ($O_VAL[_O_SALES_TOTAL] > 0)
{
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
    print COPY_OUTPUT_COPY_OUTPUT_COMBINER
        $O_VAL[_O_LOCATION_NAME],
        $O_VAL[_O_PRODUCT_CODE],
        $O_VAL[_O_SALES_TOTAL]
    ;
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
}

close(COPY_OUTPUT_COPY_OUTPUT_COMBINER);
print STDERR '[examples/copy_output_SA.pql ' . localtime() . "] $. records.";
my $benchmark_end = new Benchmark;
my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
print STDERR '[examples/copy_output_SA.pql ' . localtime() . "] Code statistics: @{{timestr($benchmark
_timediff)}}";
#-----
}

{
    package p_divert_input_copy_output_wa;
    sub divert_input_copy_output_wa
    {
        vim: syntax=perl ts=4 sw=4
#-----
#   Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
#   : https://sourceforge.net/projects/pequel/
#   Script Name : examples/copy_output_WA.pql
#   Created On  : Thu Oct 13 15:46:24 2005
#   For        :
#-----
#   Options:
#       optimize(1) optimize generated code.
#       doc_title(Copy Output Record Example Script) document title.
#       doc_email(sample@youraddress.com) document email entry.
#       doc_version(2.3) document version for pequel script.
#-----
        use strict;
        use Fcntl ':flock';
        use constant _I_LOCATION          => int    0;
        use constant _I_PRODUCT_CODE      => int    1;
        use constant _I_SALES_TOTAL       => int    2;
        use constant _I_LOCATION_NAME     => int    3;
        use constant _O_LOCATION_NAME     => int    1;
        use constant _O_PRODUCT_CODE      => int    2;
        use constant _O_SALES_TOTAL       => int    3;
        local $\="\n"; local $,="|";
        print STDERR '[examples/copy_output_WA.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 3;
        my @I_VAL;
        my @O_VAL;

```

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```

{
    package p_divert_input_copy_output_nt;
    sub divert_input_copy_output_nt
    {
        # vim: syntax=perl ts=4 sw=4
        #-----
        #   Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
        #               : https://sourceforge.net/projects/pequel/
        #   Script Name : examples/copy_output_NT.pql
        #   Created On  : Thu Oct 13 15:46:31 2005
        #   For         :
        #-----
        #   Options:
        #       optimize(1) optimize generated code.
        #       doc_title(Copy Output Record Example Script) document title.
        #       doc_email(sample@youraddress.com) document email entry.
        #       doc_version(2.3) document version for pequel script.
        #-----
        use strict;
        use Fcntl ':flock';
        use constant _I_LOCATION      => int    0;
        use constant _I_PRODUCT_CODE  => int    1;
        use constant _I_SALES_TOTAL  => int    2;
        use constant _I_LOCATION_NAME => int    3;
        use constant _O_LOCATION_NAME => int    1;
        use constant _O_PRODUCT_CODE  => int    2;
        use constant _O_SALES_TOTAL   => int    3;
        local $\\="\\n"; local $,="|";
        print STDERR "[examples/copy_output_NT.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 3;
        my @I_VAL;
        my @O_VAL;
        my $key__I_PRODUCT_CODE;
        my $previous_key__I_PRODUCT_CODE = undef;
        foreach my $f (1..3) { $O_VAL[$f] = undef; }
        # Sort:PRODUCT_CODE(asc:string)
        open(DATA, q[cat - | sort -t'|' -y -k 2,2 2>/dev/null |]) || die "Cannot open input: $!";
        if (open(COPY_OUTPUT_COPY_OUTPUT_COMBINER, '|-') == 0) # Fork -- write to child
        {
            &p_copy_output_copy_output_combiner::copy_output_copy_output_combiner;
            exit(0);
        }

        print STDERR "[examples/copy_output_NT.pql ' . localtime() . "] Start";
        use Benchmark;
        my $benchmark_start = new Benchmark;
        while (<DATA>)
        {
            print STDERR "[examples/copy_output_NT.pql ' . localtime() . "] $. records." if ($. % VERBOSE == 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)
            {
                flock(STDOUT, LOCK_EX);
                print STDOUT
                    $O_VAL[_O_LOCATION_NAME],
                    $O_VAL[_O_PRODUCT_CODE],
                    $O_VAL[_O_SALES_TOTAL]
                ;
                flock(STDOUT, LOCK_UN);
                if ($O_VAL[_O_SALES_TOTAL] > 0)
                {
                    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
                    print COPY_OUTPUT_COPY_OUTPUT_COMBINER
                        $O_VAL[_O_LOCATION_NAME],
                        $O_VAL[_O_PRODUCT_CODE],
                        $O_VAL[_O_SALES_TOTAL]
                    ;
                    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
                }

                $previous_key__I_PRODUCT_CODE = $key__I_PRODUCT_CODE;
                @O_VAL = undef;
            }

            $I_VAL[_I_LOCATION_NAME] = 'Northern Territory';
            $O_VAL[_O_LOCATION_NAME] = $I_VAL[_I_LOCATION_NAME];
        }
    }
}

```

```

        $O_VAL[_O_PRODUCT_CODE] = $I_VAL[_I_PRODUCT_CODE];
        $O_VAL[_O_SALES_TOTAL] += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
    }

    flock(STDOUT, LOCK_EX);
    print STDOUT
        $O_VAL[_O_LOCATION_NAME],
        $O_VAL[_O_PRODUCT_CODE],
        $O_VAL[_O_SALES_TOTAL]
    ;
    flock(STDOUT, LOCK_UN);
    if ($O_VAL[_O_SALES_TOTAL] > 0)
    {
        flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
        print COPY_OUTPUT_COPY_OUTPUT_COMBINER
            $O_VAL[_O_LOCATION_NAME],
            $O_VAL[_O_PRODUCT_CODE],
            $O_VAL[_O_SALES_TOTAL]
        ;
        flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
    }

    close(COPY_OUTPUT_COPY_OUTPUT_COMBINER);
    print STDERR '[examples/copy_output_NT.pql ' . localtime() . "] $. records.";
    my $benchmark_end = new Benchmark;
    my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
    print STDERR '[examples/copy_output_NT.pql ' . localtime() . "] Code statistics: @{" . timestr($benchmark
_timediff) . "}";
#-----
}

}

{
    package p_divert_input_copy_output_vic;
    sub divert_input_copy_output_vic
    {
        # vim: syntax=perl ts=4 sw=4
#-----
# Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
# : https://sourceforge.net/projects/pequel/
# Script Name : examples/copy_output_VIC.pql
# Created On : Thu Oct 13 15:46:30 2005
# For :
#-----
# Options:
# optimize(1) optimize generated code.
# doc_title(Copy Output Record Example Script) document title.
# doc_email(sample@youraddress.com) document email entry.
# doc_version(2.3) document version for pequel script.
#-----
        use strict;
        use Fcntl ':flock';
        use constant _I_LOCATION => int 0;
        use constant _I_PRODUCT_CODE => int 1;
        use constant _I_SALES_TOTAL => int 2;
        use constant _I_LOCATION_NAME => int 3;
        use constant _O_LOCATION_NAME => int 1;
        use constant _O_PRODUCT_CODE => int 2;
        use constant _O_SALES_TOTAL => int 3;
        local $\\n = "\n"; local $, = "|";
        print STDERR '[examples/copy_output_VIC.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 3;
        my @I_VAL;
        my @O_VAL;
        my $key__I_PRODUCT_CODE;
        my $previous_key__I_PRODUCT_CODE = undef;
        foreach my $f (1..3) { $O_VAL[$f] = undef; }
# Sort:PRODUCT_CODE(asc:string)
        open(DATA, q{cat - | sort -t'|' -y -k 2,2 2>/dev/null |}) || die "Cannot open input: $!";
        if (open(COPY_OUTPUT_COPY_OUTPUT_COMBINER, '|-') == 0) # Fork -- write to child
        {
            &p_copy_output_copy_output_combiner::copy_output_copy_output_combiner;
            exit(0);
        }

        print STDERR '[examples/copy_output_VIC.pql ' . localtime() . "] Start";
        use Benchmark;
        my $benchmark_start = new Benchmark;
        while (<DATA>)
        {
            print STDERR '[examples/copy_output_VIC.pql ' . localtime() . "] $. records." if ($. % VERBOSE ==
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)
    {
        flock(STDOUT, LOCK_EX);
        print STDOUT
            $O_VAL[_O_LOCATION_NAME],
            $O_VAL[_O_PRODUCT_CODE],
            $O_VAL[_O_SALES_TOTAL]
        ;
        flock(STDOUT, LOCK_UN);
        if ($O_VAL[_O_SALES_TOTAL] > 0)
        {
            flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
            print COPY_OUTPUT_COPY_OUTPUT_COMBINER
                $O_VAL[_O_LOCATION_NAME],
                $O_VAL[_O_PRODUCT_CODE],
                $O_VAL[_O_SALES_TOTAL]
            ;
            flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
        }

        $previous_key__I_PRODUCT_CODE = $key__I_PRODUCT_CODE;
        @O_VAL = undef;
    }

    $I_VAL[_I_LOCATION_NAME] = 'Victoria';
    $O_VAL[_O_LOCATION_NAME] = $I_VAL[_I_LOCATION_NAME];
    $O_VAL[_O_PRODUCT_CODE] = $I_VAL[_I_PRODUCT_CODE];
    $O_VAL[_O_SALES_TOTAL] += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
}

flock(STDOUT, LOCK_EX);
print STDOUT
    $O_VAL[_O_LOCATION_NAME],
    $O_VAL[_O_PRODUCT_CODE],
    $O_VAL[_O_SALES_TOTAL]
;
flock(STDOUT, LOCK_UN);
if ($O_VAL[_O_SALES_TOTAL] > 0)
{
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
    print COPY_OUTPUT_COPY_OUTPUT_COMBINER
        $O_VAL[_O_LOCATION_NAME],
        $O_VAL[_O_PRODUCT_CODE],
        $O_VAL[_O_SALES_TOTAL]
    ;
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
}

close(COPY_OUTPUT_COPY_OUTPUT_COMBINER);
print STDERR "[examples/copy_output_VIC.pql ' . localtime() . "] $. records.";
my $benchmark_end = new Benchmark;
my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
print STDERR "[examples/copy_output_VIC.pql ' . localtime() . "] Code statistics: @[timestr($benchmark
k_timediff)]]";
#-+-+-+
}

}

{
    package p_divert_input_copy_output_nsw;
    sub divert_input_copy_output_nsw
    {
        vim: syntax=perl ts=4 sw=4
#-+-+-+
#   Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
#   : https://sourceforge.net/projects/pequel/
#   Script Name : examples/copy_output_NSW.pql
#   Created On  : Thu Oct 13 15:46:28 2005
#   For         :
#-+-+-+
#   Options:
#       optimize(1) optimize generated code.
#       doc_title(Copy Output Record Example Script) document title.
#       doc_email(sample@youraddress.com) document email entry.
#       doc_version(2.3) document version for pequel script.
#-+-+-+
        use strict;

```

```

use Fcntl ':flock';
use constant _I_LOCATION      => int    0;
use constant _I_PRODUCT_CODE  => int    1;
use constant _I_SALES_TOTAL   => int    2;
use constant _I_LOCATION_NAME => int    3;
use constant _O_LOCATION_NAME => int    1;
use constant _O_PRODUCT_CODE  => int    2;
use constant _O_SALES_TOTAL    => int    3;
local $\\="\n"; local $,="|";
print STDERR '[examples/copy_output_NSW.pql ' . localtime() . "] Init";
use constant VERBOSE => int 10000;
use constant LAST_ICELL => int 3;

my @I_VAL;
my @O_VAL;
my $key__I_PRODUCT_CODE;
my $previous_key__I_PRODUCT_CODE = undef;
foreach my $f (1..3) { $O_VAL[$f] = undef; }

# Sort:PRODUCT_CODE(asc:string)
open(DATA, q{cat - | sort -t'|' -y -k 2,2 2>/dev/null |}) || die "Cannot open input: $!";
if (open(COPY_OUTPUT_COPY_OUTPUT_COMBINER, '|-') == 0) # Fork -- write to child
{
    &p_copy_output_copy_output_combiner::copy_output_copy_output_combiner;
    exit(0);
}

print STDERR '[examples/copy_output_NSW.pql ' . localtime() . "] Start";
use Benchmark;
my $benchmark_start = new Benchmark;
while (<DATA>)
{
    print STDERR '[examples/copy_output_NSW.pql ' . localtime() . "] $. records." if ($. % VERBOSE ==
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)
    {
        flock(STDOUT, LOCK_EX);
        print STDOUT
            $O_VAL[_O_LOCATION_NAME],
            $O_VAL[_O_PRODUCT_CODE],
            $O_VAL[_O_SALES_TOTAL]
        ;
        flock(STDOUT, LOCK_UN);
        if ($O_VAL[_O_SALES_TOTAL] > 0)
        {
            flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
            print COPY_OUTPUT_COPY_OUTPUT_COMBINER
                $O_VAL[_O_LOCATION_NAME],
                $O_VAL[_O_PRODUCT_CODE],
                $O_VAL[_O_SALES_TOTAL]
            ;
            flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
        }

        $previous_key__I_PRODUCT_CODE = $key__I_PRODUCT_CODE;
        @O_VAL = undef;
    }

    $I_VAL[_I_LOCATION_NAME] = 'New South Wales';
    $O_VAL[_O_LOCATION_NAME] = $I_VAL[_I_LOCATION_NAME];
    $O_VAL[_O_PRODUCT_CODE] = $I_VAL[_I_PRODUCT_CODE];
    $O_VAL[_O_SALES_TOTAL] += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
}

flock(STDOUT, LOCK_EX);
print STDOUT
    $O_VAL[_O_LOCATION_NAME],
    $O_VAL[_O_PRODUCT_CODE],
    $O_VAL[_O_SALES_TOTAL]
;
flock(STDOUT, LOCK_UN);
if ($O_VAL[_O_SALES_TOTAL] > 0)
{
    flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_EX);
    print COPY_OUTPUT_COPY_OUTPUT_COMBINER
        $O_VAL[_O_LOCATION_NAME],
        $O_VAL[_O_PRODUCT_CODE],
        $O_VAL[_O_SALES_TOTAL]
    ;
}

```

```

        flock(COPY_OUTPUT_COPY_OUTPUT_COMBINER, LOCK_UN);
    }

    close(COPY_OUTPUT_COPY_OUTPUT_COMBINER);
    print STDERR '[examples/copy_output_NSW.pql ' . localtime() . "] $. records.";
    my $benchmark_end = new Benchmark;
    my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
    print STDERR '[examples/copy_output_NSW.pql ' . localtime() . "] Code statistics: @{" . timestr($benchmark_end - $benchmark_start) . "}";
}

}

{
    package p_copy_output_copy_output_combiner;
    sub copy_output_copy_output_combiner
    {
        # vim: syntax=perl ts=4 sw=4
        #-----
        # Generated By: pequel Version 2.3-5, Build: Wednesday October 12 23:16:49 BST 2005
        #               : https://sourceforge.net/projects/pequel/
        # Script Name : examples/copy_output_combiner.pql
        # Created On  : Thu Oct 13 15:46:25 2005
        # For         :
        #-----
        # Options:
        #   optimize(1) optimize generated code.
        #   doc_title(Copy Output Record Example Script) document title.
        #   doc_email(sample@youraddress.com) document email entry.
        #   doc_version(2.3) document version for pequel script.
        #-----
        use strict;
        use Fcntl ':flock';
        use constant _I_LOCATION_NAME => int 0;
        use constant _I_PRODUCT_CODE => int 1;
        use constant _I_SALES_TOTAL => int 2;
        use constant _I_DESCRIPTION => int 3;
        use constant _O_LOCATION_NAME => int 1;
        use constant _O_DESCRIPTION => int 2;
        use constant _O_SALES_TOTAL => int 3;
        local $\\ = "\n"; local $, = ",";
        print STDERR '[examples/copy_output_combiner.pql ' . localtime() . "] Init";
        use constant VERBOSE => int 10000;
        use constant LAST_ICELL => int 3;
        my @I_VAL;
        my @O_VAL;
        my $key__I_LOCATION_NAME;
        my $previous_key__I_LOCATION_NAME = undef;
        foreach my $f (1..3) { $O_VAL[$f] = undef; }
        # Sort:LOCATION_NAME(asc:string)
        open(DATA, q{cat - | sort -t'|' -y -k 1,1 2>/dev/null |}) || die "Cannot open input: $!";
        print STDERR '[examples/copy_output_combiner.pql ' . localtime() . "] Start";
        use Benchmark;
        my $benchmark_start = new Benchmark;
        while (<DATA>)
        {
            print STDERR '[examples/copy_output_combiner.pql ' . localtime() . "] $. records." if ($. % VERBOS
E == 0);
            chomp;
            @I_VAL = split("[|]", $_);
            $key__I_LOCATION_NAME = $I_VAL[_I_LOCATION_NAME];
            if (!defined($previous_key__I_LOCATION_NAME))
            {
                $previous_key__I_LOCATION_NAME = $key__I_LOCATION_NAME;
            }

            elsif ($previous_key__I_LOCATION_NAME ne $key__I_LOCATION_NAME)
            {
                flock(STDOUT, LOCK_EX);
                print STDOUT
                    $O_VAL[_O_LOCATION_NAME],
                    $O_VAL[_O_DESCRIPTION],
                    $O_VAL[_O_SALES_TOTAL]
                ;
                flock(STDOUT, LOCK_UN);
                $previous_key__I_LOCATION_NAME = $key__I_LOCATION_NAME;
                @O_VAL = undef;
            }

            $O_VAL[_O_LOCATION_NAME] = $I_VAL[_I_LOCATION_NAME];
            $I_VAL[_I_DESCRIPTION] = 'State Total';
            $O_VAL[_O_DESCRIPTION] = $I_VAL[_I_DESCRIPTION];
            $O_VAL[_O_SALES_TOTAL] += $I_VAL[_I_SALES_TOTAL] unless ($I_VAL[_I_SALES_TOTAL] eq '');
        }
    }
}

```

```

        flock(STDOUT, LOCK_EX);
        print STDOUT
            $O_VAL[_O_LOCATION_NAME],
            $O_VAL[_O_DESCRIPTION],
            $O_VAL[_O_SALES_TOTAL]
        ;
        flock(STDOUT, LOCK_UN);
        print STDERR '[examples/copy_output_combiner.pql ' . localtime() . "] $. records.";
        my $benchmark_end = new Benchmark;
        my $benchmark_timediff = timediff($benchmark_start, $benchmark_end);
        print STDERR '[examples/copy_output_combiner.pql ' . localtime() . "] Code statistics: @{[timestr($ben
chmark_timediff)]}";
#-----
    }
}

```

7. ABOUT PEQUEL

This document was generated by Pequel.

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

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