JOBSHEET 4

MULTI RESOURCE

MATA KULIAH DATA WAREHOUSE

Oleh:

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PROGRAM STUDI D4 SISTEM INFORMASI BISNIS

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

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STUDI KASUS

Pak Ozai merupakan staff di PT Indomarko Prismatama. PT Indomarko Prisma tama merupakan perusahaan retail yang memiliki usaha indomarti, superindi dan indigrosir. Pak ozai mempelajari proses bisnis dari perusahaan tersebut dan mencoba untuk membangun perusahaan sendiri dengan nama PT Ozai Enterprise dan membangun 3 cabang. Untuk dapat bersaing, pak ozai perlu melakukan analisa dari penjualan di ketiga cabang tersebut. 3 cabang tersebut mencatat penjualannya pada satu file excel.

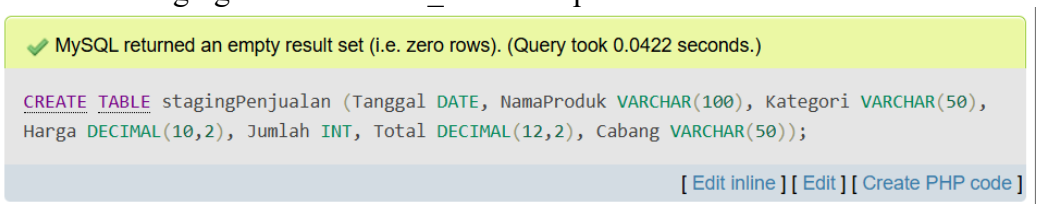
Toko Azura : https://github.com/dik4rizky/datasources/blob/main/tokoazura.xls

Toko Zuko : https://github.com/dik4rizky/datasources/blob/main/tokozuko.xls

Toko Iroh : https://github.com/dik4rizky/datasources/blob/main/tokoiroh.xls

Langkah Praktikum

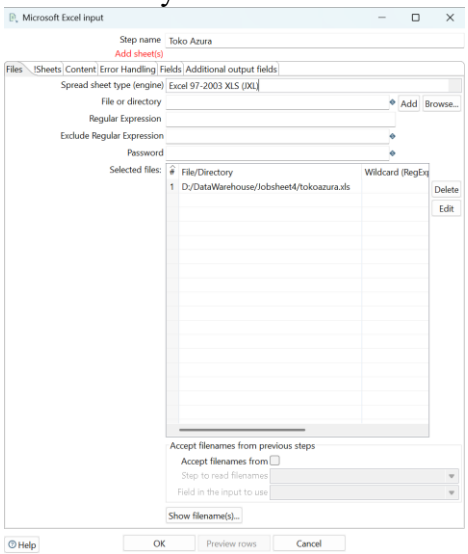
Buat tabel staging di database dw_OzaiEnterprise



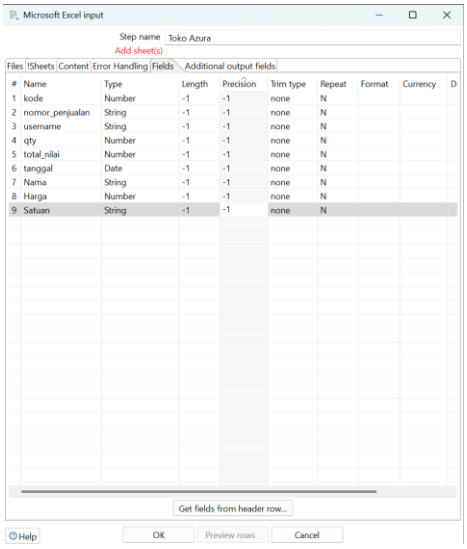
Drag and drop 3 Excel Input untuk data tokoazura, tokozuko, dan tokoiroh

Toko Azura

Upload file tokoazura tekan tombol browse dan klik ok. Jika berhasil maka muncul pada FileDirectory



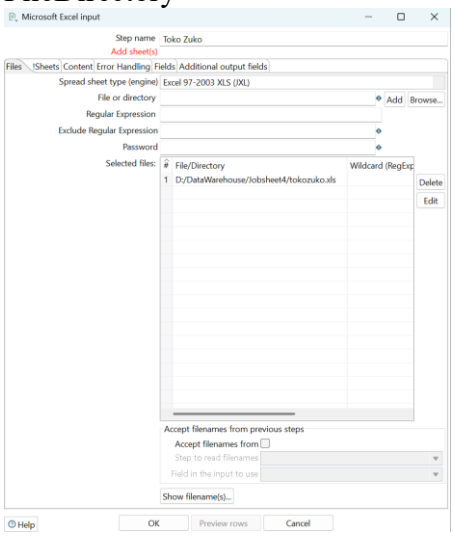
Kemudian klik tombol field lalu klik get field. Sesuaikan setiap field pada excel tokoazura seperti berikut



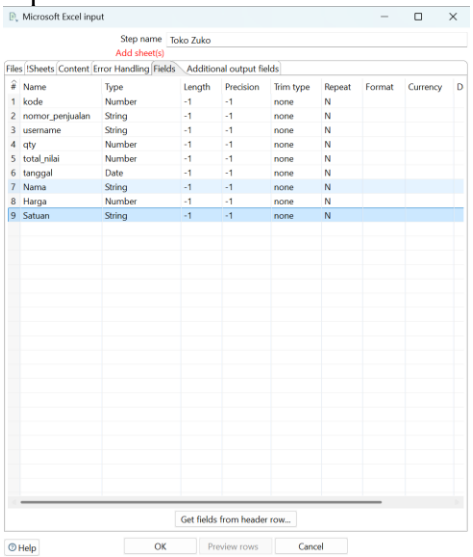
Kemudian klik ok

Toko Zuko

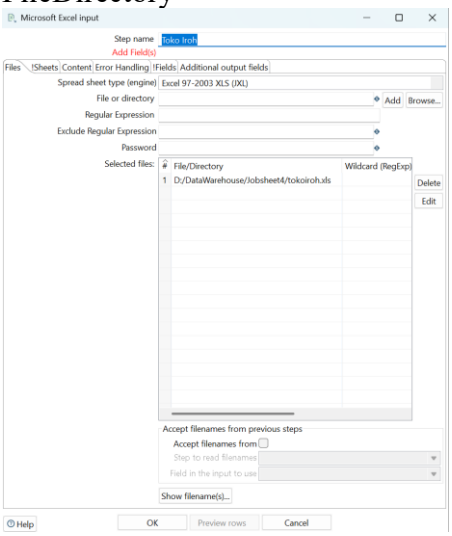
Upload file tokozuko tekan tombol browse dan klik ok. Jika berhasil maka muncul pada FileDirectory



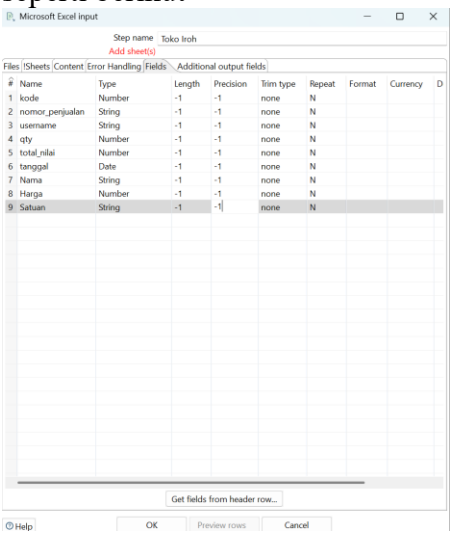
Kemudian klik tombol field lalu klik get field. Sesuaikan setiap field pada excel tokozuko seperti berikut



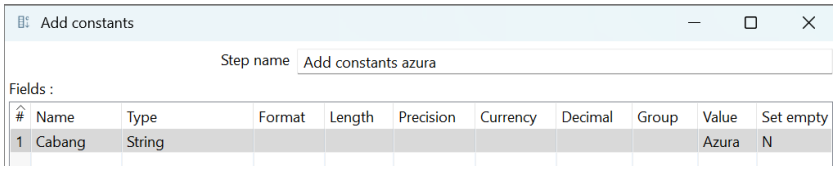
Toko Iroh
Upload file tokozuko tekan tombol browse dan klik ok. Jika berhasil maka muncul pada FileDirectory



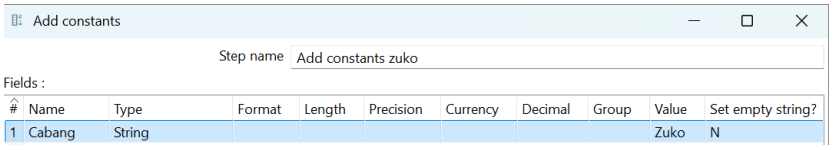
Kemudian klik tombol field lalu klik get field. Sesuaikan setiap field pada excel tokozuko seperti berikut



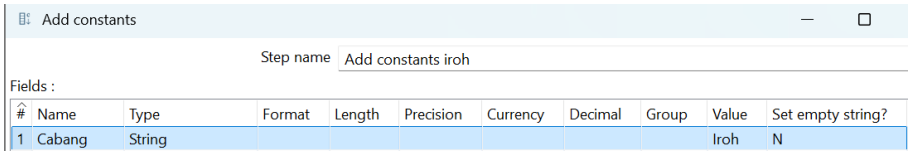
Tambahkan **add constants** (untuk mengisi field cabang dengan value constant)
Toko Azura



Toko Zuko

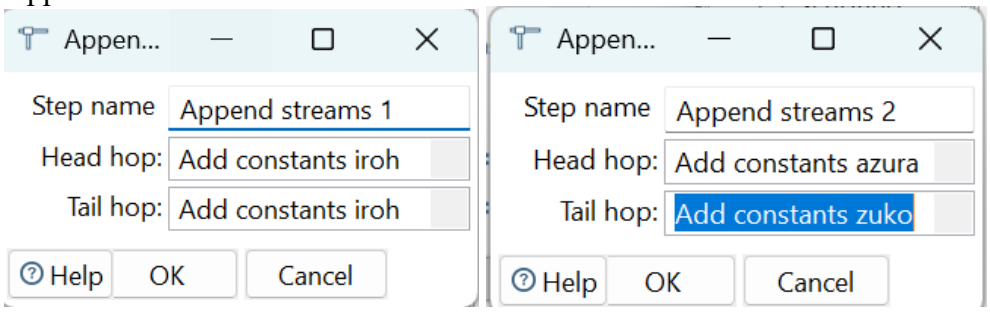


Toko Iroh



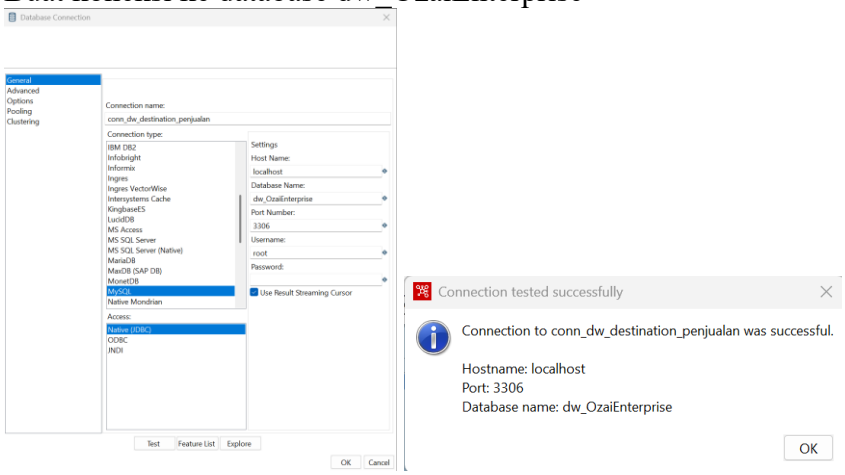
Lakukan union dengan Append Streams atau Merge Rows untuk menggabungkan ketiga data menjadi satu

Append streams 1 dan 2

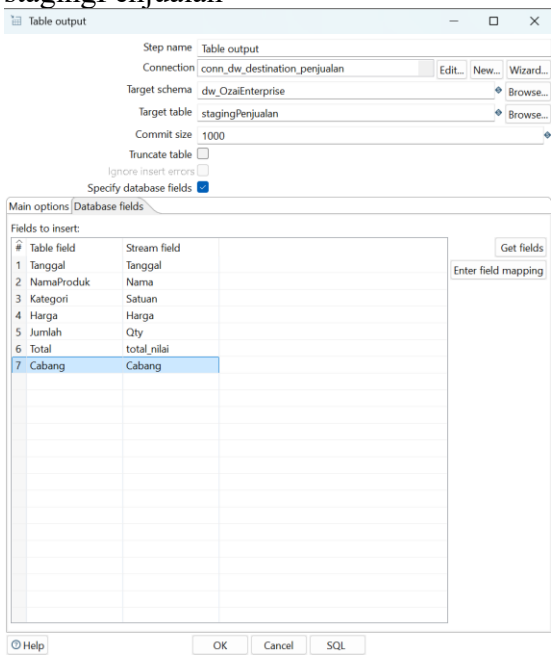


Konfigurasi untuk tabel output

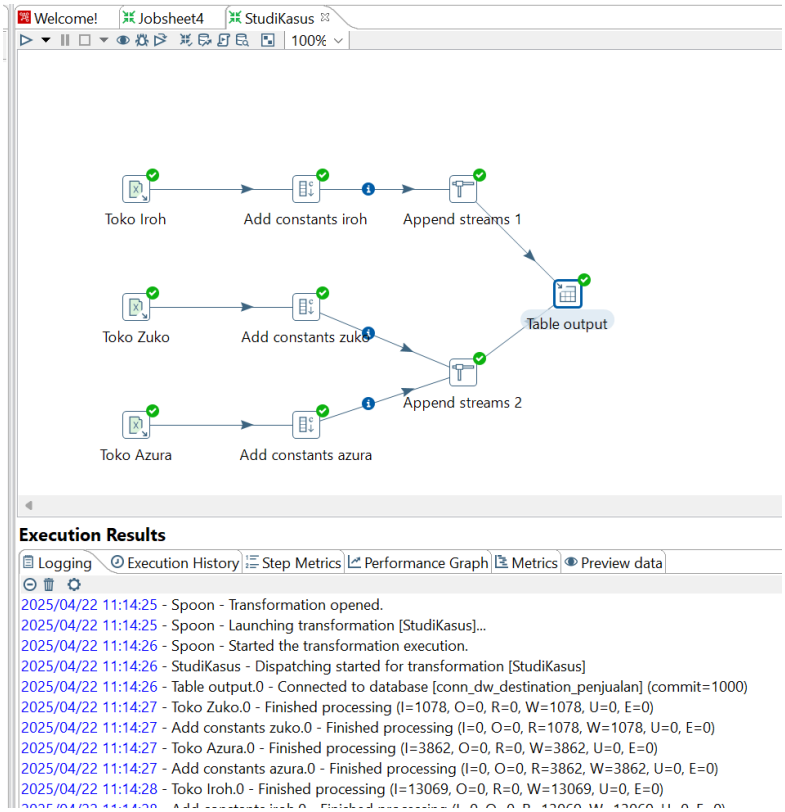
Buat koneksi ke database dw_OzaiEnterprise



Konfigurasi tabel output dan database fields nya sesuai dengan struktur tabel stagingPenjualan



Hasil akhir



Isi tabel pada database :

Showing rows 0 - 49 (18009 total, Query took 0.0010 seconds.)

```
SELECT * FROM stagingpenjualan;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh

1 > >> | Number of rows: 50

Extra options

Tanggal	NamaProduk	Kategori	Harga	Jumlah	Total	Cabang
2008-02-18	INDOCAFE CAPUCINO KTK 5X25G	PCS	6916.25	2	353700.00	Azura
2008-02-18	ALKALINE LR-03 (ISI 2)	LSN	7936.25	1	8250.00	Azura
2008-01-02	NUTRIJELL STRAW 15 GR	BOX	2667.50	1	33000.00	Azura
2008-01-02	NUTRIJELL ANGGUR 15 GR	BOX	2667.50	1	33000.00	Azura
2008-01-02	NUTRIJELL PLAIN 15 GR	BOX	2667.50	1	33000.00	Azura
2008-01-02	REJOICE FAMILY C 175	PCS	10890.00	1	187500.00	Azura
2008-01-02	WINGS BIRU 500 K 209G	DOS	2250.00	2	46050.00	Azura
2008-01-02	SOKLIN MATIC FRONT LOAD 1KG	DOS	20000.00	1	26650.00	Azura
2008-01-07	SOKLIN HIGINIS 900	DOS	15625.00	1	20250.00	Azura
2008-01-17	AJINOMOTO 50GR	PCS	1418.75	2	56500.00	Azura

Dimensi Waktu

Membuat dabatase dw_OzaiEnterprise

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0242 seconds.)

```
CREATE DATABASE dw_OzaiEnterprise;
```

[Edit inline] [Edit] [Create PHP code]

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 seconds.)

```
use dw_OzaiEnterprise;
```

[Edit inline] [Edit] [Create PHP code]

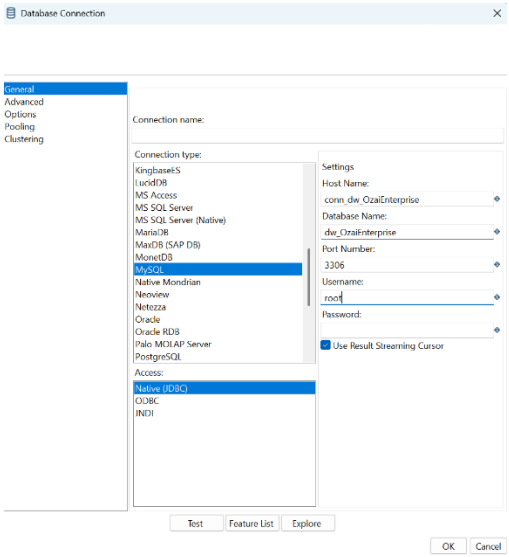
Membuat table dimDate

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0451 seconds.)

```
CREATE TABLE dimDate( id_dimDate int not null
AUTO_INCREMENT PRIMARY KEY, date date, year int, month int,
day int );
```

[Edit inline] [Edit] [Create PHP code]

Membuat koneksi ke database dw_OzaiEnterprise



Hasil Percobaan Praktikum dapat dilihat pada file Jobsheet4.krt

Percobaan berhasil karena table dimdate terisi 1825 rows

Showing rows 0 - 499 (1825 total, Query took 0.0011 seconds.)

```
SELECT * FROM `dimdate`
```

Isi Table dimdate seperti berikut

id_dimDate	date	year	month	day
1	2003-01-01	2003	1	1
2	2003-01-02	2003	1	2
3	2003-01-03	2003	1	3
4	2003-01-04	2003	1	4
5	2003-01-05	2003	1	5

TUGAS 1

Buka preview tab pada execution result area di setiap proses object. amati input dan output data yang ada. bandingkan di setiap prosesnya. jelaskan perbedaan disetiap prosesnya.

Stepname	Copynr	Read	Written	Input	Output
Generate rows	0	0	1825	0	0
Add sequence	0	1825	1825	0	0
Calculator	0	1825	1825	0	0
Select values	0	1825	1825	0	0
Database lookup	0	1825	1825	0	0
Filter rows	0	1825	1825	0	0
Table output	0	1825	1825	0	1825

Generate rows

Input	Output	Keterangan
Tidak ada	# CurrentDate 1 01-01-2003 2 01-01-2003 3 01-01-2003 4 01-01-2003 5 01-01-2003	Membuat field currentdate yang berisi 1825 rows

Add Sequences

Input	Output	Keterangan
# CurrentDate 1 01-01-2003 2 01-01-2003 3 01-01-2003 4 01-01-2003 5 01-01-2003 Output dari generate rows	# CurrentDate incrementDay 1 01-01-2003 0 2 01-01-2003 1 3 01-01-2003 2 4 01-01-2003 3 5 01-01-2003 4	Terbentuk field baru incrementDay yang dimulai dari nilai 0 dan bertambah terus

Calculator

Input	Output	Keterangan

# CurrentDate incrementDay 1 01-01-2003 0 2 01-01-2003 1 3 01-01-2003 2 4 01-01-2003 3 5 01-01-2003 4 Output dari Add Sequences	# CurrentDate incrementDay streamDate streamYear streamMonth streamDay 1 01-01-2003 0 2003/01/01 00:00:00.000 2003 1 1 2 01-01-2003 1 2003/01/02 00:00:00.000 2003 1 2 3 01-01-2003 2 2003/01/03 00:00:00.000 2003 1 3 4 01-01-2003 3 2003/01/04 00:00:00.000 2003 1 4 5 01-01-2003 4 2003/01/05 00:00:00.000 2003 1 5	Terbentuk field baru streamDate: tanggal awal 01-01-2023 bertambah sesuai baris incrementDay streamYear: mengambil year pada field streamDate streamMonth: mengambil month pada field streamDate streamDay: mengambil day pada field streamDate

Select values

Input	Output	Keterangan
# CurrentDate incrementDay streamDate streamYear streamMonth streamDay 1 01-01-2003 0 2003/01/01 00:00:00.000 2003 1 1 2 01-01-2003 1 2003/01/02 00:00:00.000 2003 1 2 3 01-01-2003 2 2003/01/03 00:00:00.000 2003 1 3 4 01-01-2003 3 2003/01/04 00:00:00.000 2003 1 4 5 01-01-2003 4 2003/01/05 00:00:00.000 2003 1 5 Output dari Calculator	# streamDate streamYear streamMonth streamDay 1 2003/01/01 00:00:00.000 2003 1 1 2 2003/01/02 00:00:00.000 2003 1 2 3 2003/01/03 00:00:00.000 2003 1 3 4 2003/01/04 00:00:00.000 2003 1 4 5 2003/01/05 00:00:00.000 2003 1 5	Menghapus field currentdate & inceremendday

Database lookup

Input	Output	Keterangan
# streamDate streamYear streamMonth streamDay 1 2003/01/01 00:00:00.000 2003 1 1 2 2003/01/02 00:00:00.000 2003 1 2 3 2003/01/03 00:00:00.000 2003 1 3 4 2003/01/04 00:00:00.000 2003 1 4 5 2003/01/05 00:00:00.000 2003 1 5 Output select values	# streamDate streamYear streamMonth streamDay date year month day 1 2003/01/01 00:00:00.000 2003 1 1 <null> <null> <null> <null> 2 2003/01/02 00:00:00.000 2003 1 2 <null> <null> <null> <null> 3 2003/01/03 00:00:00.000 2003 1 3 <null> <null> <null> <null> 4 2003/01/04 00:00:00.000 2003 1 4 <null> <null> <null> <null> 5 2003/01/05 00:00:00.000 2003 1 5 <null> <null> <null> <null>	Muncul field date year, month, day

Filter rows

Input	Output	Keterangan
# streamDate streamYear streamMonth streamDay date year month day 1 2003/01/01 00:00:00.000 2003 1 1 <null> <null> <null> <null> 2 2003/01/02 00:00:00.000 2003 1 2 <null> <null> <null> <null> 3 2003/01/03 00:00:00.000 2003 1 3 <null> <null> <null> <null> 4 2003/01/04 00:00:00.000 2003 1 4 <null> <null> <null> <null> 5 2003/01/05 00:00:00.000 2003 1 5 <null> <null> <null> <null> Output database lookup	# streamDate streamYear streamMonth streamDay date year month day 1 2003/01/01 00:00:00.000 2003 1 1 <null> <null> <null> <null> 2 2003/01/02 00:00:00.000 2003 1 2 <null> <null> <null> <null> 3 2003/01/03 00:00:00.000 2003 1 3 <null> <null> <null> <null> 4 2003/01/04 00:00:00.000 2003 1 4 <null> <null> <null> <null> 5 2003/01/05 00:00:00.000 2003 1 5 <null> <null> <null> <null>	Muncul field date year, month, day

Table Output

Input	Output	Keterangan
# streamDate streamYear streamMonth streamDay date year month day 1 2003/01/01 00:00:00.000 2003 1 1 <null> <null> <null> <null> 2 2003/01/02 00:00:00.000 2003 1 2 <null> <null> <null> <null> 3 2003/01/03 00:00:00.000 2003 1 3 <null> <null> <null> <null> 4 2003/01/04 00:00:00.000 2003 1 4 <null> <null> <null> <null> 5 2003/01/05 00:00:00.000 2003 1 5 <null> <null> <null> <null> Output filter rows	# streamDate streamYear streamMonth streamDay date year month day 1 2003/01/01 00:00:00.000 2003 1 1 <null> <null> <null> <null> 2 2003/01/02 00:00:00.000 2003 1 2 <null> <null> <null> <null> 3 2003/01/03 00:00:00.000 2003 1 3 <null> <null> <null> <null> 4 2003/01/04 00:00:00.000 2003 1 4 <null> <null> <null> <null> 5 2003/01/05 00:00:00.000 2003 1 5 <null> <null> <null> <null>	Muncul field date year, month, day