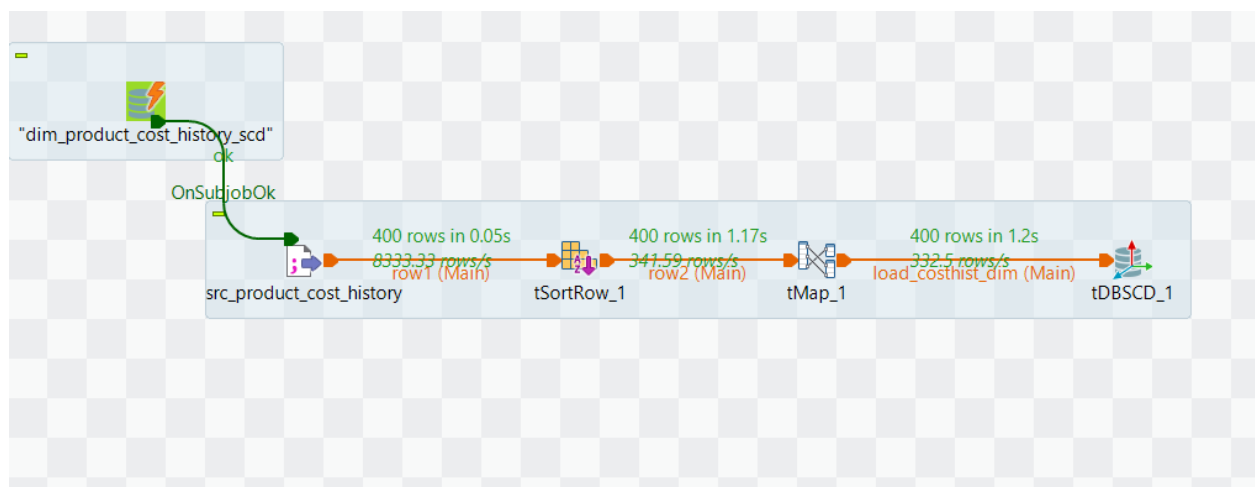


Talend SCD implementation with Audit Logging and Orchestration pipeline (Individual Submission)

--By AMEY PARANGE

wf_load_dim_product_cost_history_scd



SCD component editor

filter

Unused

Source keys

Product_id

Surrogate keys

name SK_ID

creation Auto increment

complement

Type 0 fields

Type 1 fields

DI_JobID

DI_DateToWarehouse

Type 2 fields

CostPrice

ProductName

Versioning

type	name	creation	compleme...
start	SCD_StartDat	Input field	StartDate_Rev
end	SCD_EndDate	Fixed year value	2050
<input checked="" type="checkbox"/> versi...	SCD_Version		
<input checked="" type="checkbox"/> active	IsActive		

Type 3 fields

current value	previous value

OK

Cancel

SQLOutput:

```

1 • select * from dim_product_cost_history_scd;
2
3 • select count(*) from dim_product_cost_history_scd;

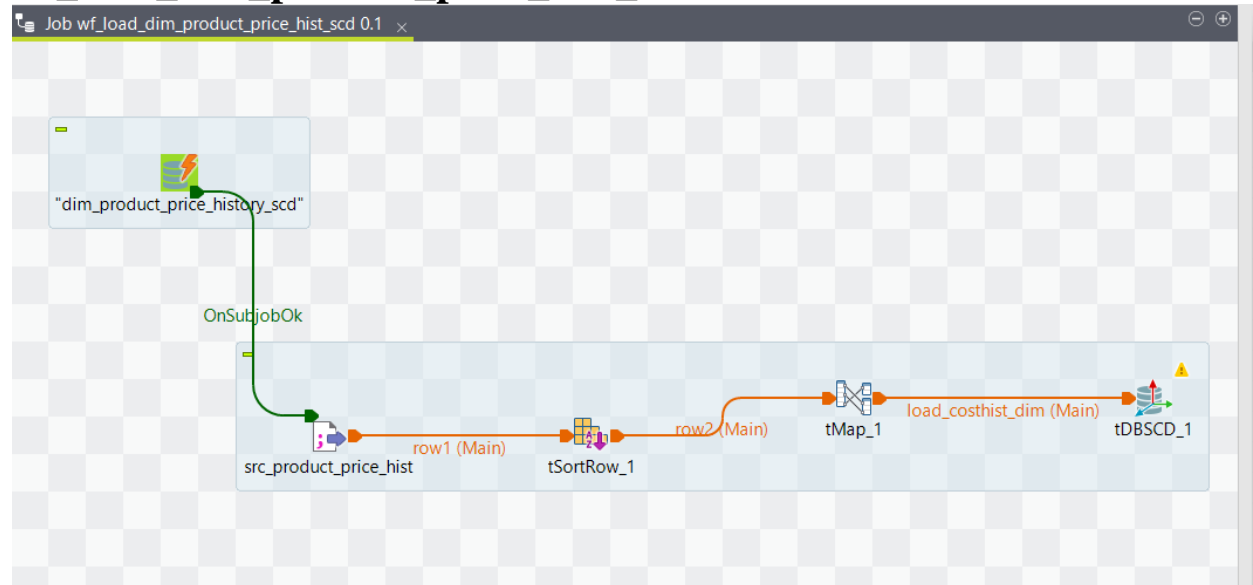
```

SK_ID	Product_id	ProductName	CostPrice	SCD_StartDate	SCD_EndDate	SCD_Version	IsActive	DI_DateToWarehouse	DI_JobID
2	707	Sport-100 Helmet, Red	13.8782	2020-05-30 00:00:00	2021-05-30 00:00:00	2	0	2023-10-29 22:25:00	cretS2
3	707	Sport-100 Helmet, Red	13.0863	2021-05-30 00:00:00	2050-01-01 12:00:00	3	1	2023-10-29 22:25:00	cretS2
4	708	Sport-100 Helmet, Black	12.0278	2019-05-31 00:00:00	2020-05-30 00:00:00	1	0	2023-10-29 22:25:00	cretS2
5	708	Sport-100 Helmet, Black	13.8782	2020-05-30 00:00:00	2021-05-30 00:00:00	2	0	2023-10-29 22:25:00	cretS2
6	708	Sport-100 Helmet, Black	13.0863	2021-05-30 00:00:00	2050-01-01 12:00:00	3	1	2023-10-29 22:25:00	cretS2
7	709	Mountain Bike-V3	4.3963	2018-03-31 00:00:00	2019-05-31 00:00:00	1	0	2023-10-29 22:25:00	cretS2
8	709	Mountain Bike Socks, M	3.3963	2019-05-31 00:00:00	2019-05-31 00:00:00	2	0	2023-10-29 22:25:00	cretS2
9	709	Mountain Bike	3.3963	2019-05-31 00:00:00	2020-01-15 00:00:00	3	0	2023-10-29 22:25:00	cretS2
10	709	Mountain Bike Socks-2, M	5.3963	2020-01-15 00:00:00	2020-01-15 00:00:00	4	0	2023-10-29 22:25:00	cretS2
11	709	Mountain Bike-V3	5.3963	2020-01-15 00:00:00	2022-03-31 00:00:00	5	0	2023-10-29 22:25:00	cretS2
12	709	Mountain Bike-V3	4.3963	2022-03-31 00:00:00	2050-01-01 12:00:00	6	1	2023-10-29 22:25:00	cretS2
13	710	Mountain Bike Socks, L	3.3963	2019-05-31 00:00:00	2050-01-01 12:00:00	1	1	2023-10-29 22:25:00	cretS2

```
3 • select count(*) from dim_product_cost_history_scd;
```

result Grid	Filter Rows:	Export:	Wrap Cell Content:
count(*)			
400			

wf_load_dim_product_price_hist_scd



SCD component editor

filter

Unused

Source keys

Product_id

Surrogate keys

name

SK_ID

creation

Auto increment

complement

Type 0 fields

Type 1 fields

DI_DateToWarehouse

DI_JobID

Type 2 fields

ListPrice

ProductName

Versioning

type	name	creation	compleme...
start	SCD_StartDate	Input field	StartDate_Rev
end	SCD_EndDate	Fixed year value	2050
<input checked="" type="checkbox"/> versi...	SCD_Version		
<input checked="" type="checkbox"/> active	IsActive		

Type 3 fields

current value	previous value
Start_date	Previous_Start_date

OK

Cancel

SQL Output: Row is 390 as price has not been changed but revised on different dates with same price

```

1 • select * from dim_product_price_history_scd;
2
3 • select count(*) from dim_product_price_history_scd;

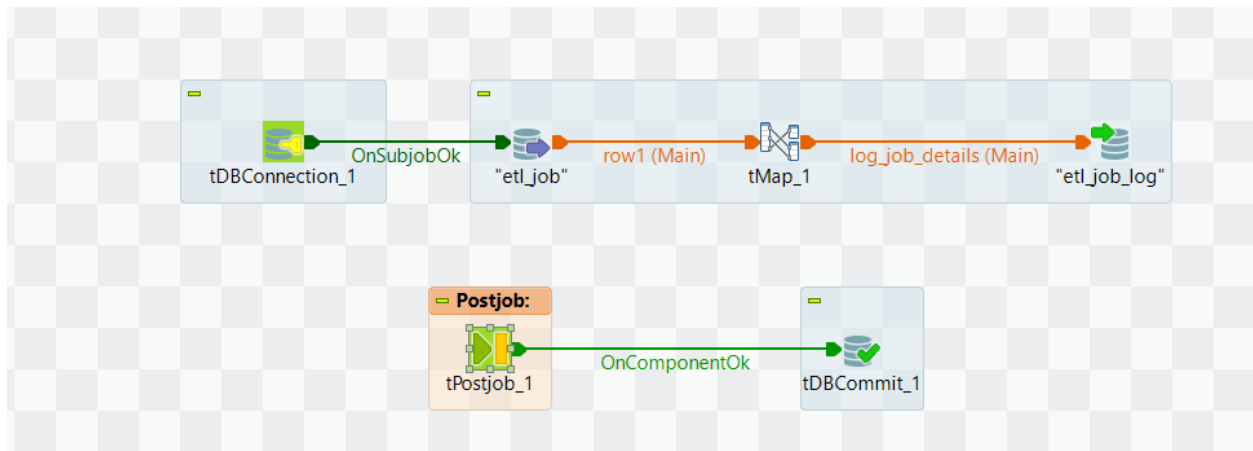
```

	SK_ID	Product_id	ProductName	ListPrice	Start_date	Previous_Start_date	SCD_StartDate	SCD_EndDate	SCD_Version	IsActive	DI_DateToWarehouse
1	707	Sport-100 Helmet, Red	33.6442	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
2	707	Sport-100 Helmet, Red	34.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
3	708	Sport-100 Helmet, Black	33.6442	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
4	708	Sport-100 Helmet, Black	34.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
5	709	Mountain Bike Socks, M	9.5	2019-05-31			2019-05-31 00:00:00	2050-01-01 12:00:00	1	1	2023-10-29 22:29:00
6	710	Mountain Bike Socks, L	9.5	2019-05-31			2019-05-31 00:00:00	2050-01-01 12:00:00	1	1	2023-10-29 22:29:00
7	711	Sport-100 Helmet, Blue	33.6442	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
8	711	Sport-100 Helmet, Blue	34.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
9	712	AWC Logo Cap	8.6442	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
10	712	AWC Logo Cap	8.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
11	713	Long-Sleeve Logo Jers...	48.0673	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
12	713	Long-Sleeve Logo Jers...	49.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
13	714	Long-Sleeve Logo Jers...	48.0673	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
14	714	Long-Sleeve Logo Jers...	49.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
15	715	Long-Sleeve Logo Jers...	48.0673	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
16	715	Long-Sleeve Logo Jers...	49.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00
17	716	Long-Sleeve Logo Jers...	48.0673	2020-05-30	2019-05-31		2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 22:29:00
18	716	Long-Sleeve Logo Jers...	49.99	2021-05-30	2020-05-30		2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 22:29:00

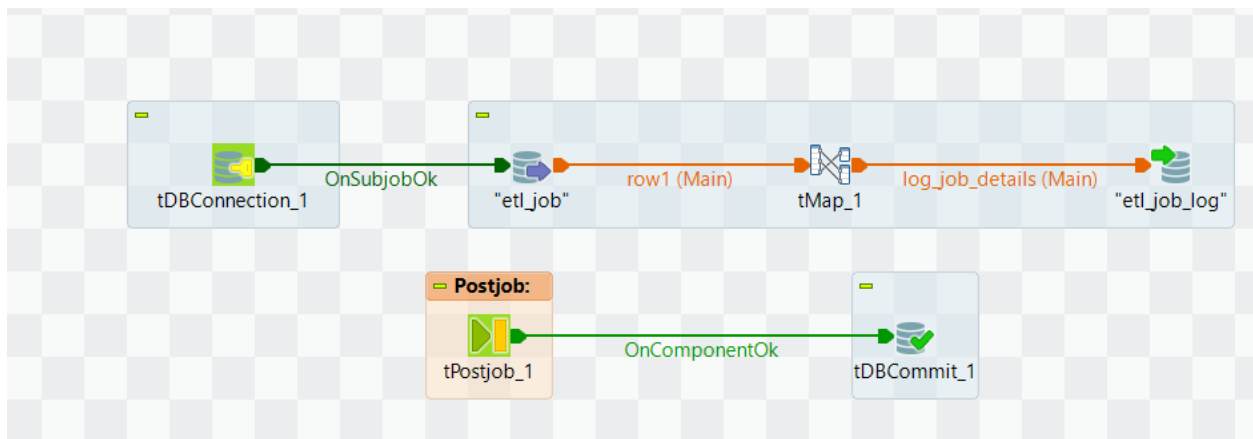
3 • `select count(*) from dim_product_price_history_scd;`

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	count(*)			
▶	390			

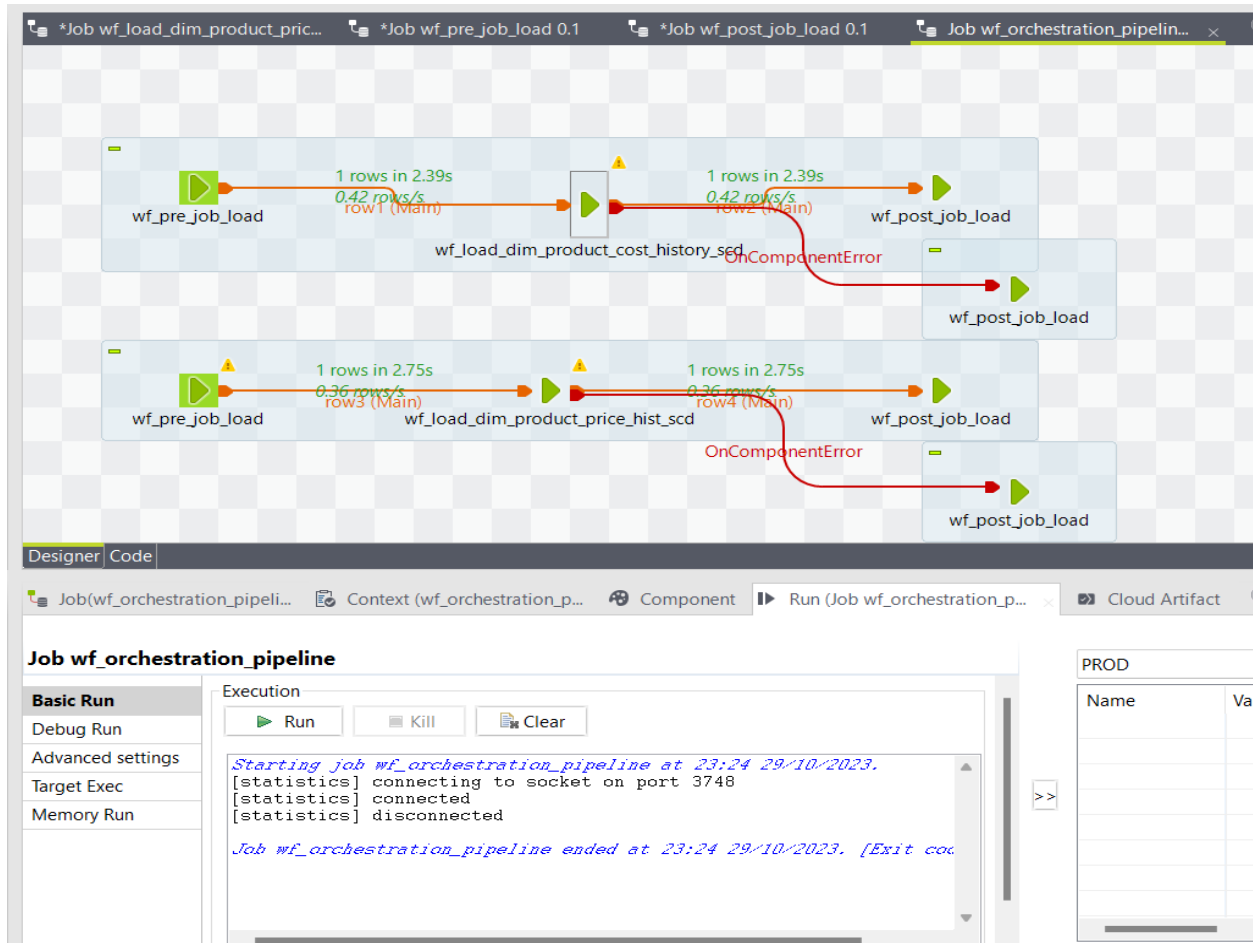
wf_pre_job_load



wf_post_job_load



wf_orchestration_pipeline



SQL OUTPUT:

```
1 • select * from etl_job;
```

job_id	job_name	table_name	schedule	created_by	created_date
1	wf_load_dim_product_price_hist_scd	dim_product_price_history_scd	DAILY	root@localhost	2023-10-29 22:40:27
2	wf_load_dim_product_cost_history_scd	dim_product_cost_history_scd	DAILY	root@localhost	2023-10-29 22:40:33
NULL	NULL	NULL	NULL	NULL	NULL

```
1 • select * from dim_product_price_history_scd;
```

Result Grid										
Filter Rows:										
Edit: Export/Import: Wrap Cell Content:										
SK_ID	Product_id	ProductName	ListPrice	Start_date	Previous_Start_date	SCD_StartDate	SCD_EndDate	SCD_Version	IsActive	DI_DateToWarehouse
1	707	Sport-100 Helmet, Red	33.6442	2020-05-30	2019-05-31	2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 23:24:32
2	707	Sport-100 Helmet, Red	34.99	2021-05-30	2020-05-30	2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 23:24:32
3	708	Sport-100 Helmet, Black	33.6442	2020-05-30	2019-05-31	2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 23:24:32
4	708	Sport-100 Helmet, Black	34.99	2021-05-30	2020-05-30	2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 23:24:32
5	709	Mountain Bike Socks, M	9.5	2019-05-31	NULL	2019-05-31 00:00:00	2050-01-01 12:00:00	1	1	2023-10-29 23:24:32
6	710	Mountain Bike Socks, L	9.5	2019-05-31	NULL	2019-05-31 00:00:00	2050-01-01 12:00:00	1	1	2023-10-29 23:24:32
7	711	Sport-100 Helmet, Blue	33.6442	2020-05-30	2019-05-31	2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 23:24:32
8	711	Sport-100 Helmet, Blue	34.99	2021-05-30	2020-05-30	2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 23:24:32
9	712	AWC Logo Cap	8.6442	2020-05-30	2019-05-31	2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 23:24:32
10	712	AWC Logo Cap	8.99	2021-05-30	2020-05-30	2021-05-30 00:00:00	2050-01-01 12:00:00	2	1	2023-10-29 23:24:32
11	713	Long-Sleeve Logo Jers...	48.0673	2020-05-30	2019-05-31	2019-05-31 00:00:00	2021-05-30 00:00:00	1	0	2023-10-29 23:24:32

```
1 • select * from dim_product_cost_history_scd;
```

Result Grid										
Filter Rows:			Edit:		Export/Import:		Wrap Cell Content:			
	SK_ID	Product_id	ProductName	CostPrice	SCD_StartDate	SCD_EndDate	SCD_Version	IsActive	DI_DateToWarehouse	DI_JobID
▶	1	707	Sport-100 Helmet, Red	12.0278	2019-05-31 00:00:00	2020-05-30 00:00:00	1	0	2023-10-29 23:24:30	rY1K7R
	2	707	Sport-100 Helmet, Red	13.8782	2020-05-30 00:00:00	2021-05-30 00:00:00	2	0	2023-10-29 23:24:30	rY1K7R
	3	707	Sport-100 Helmet, Red	13.0863	2021-05-30 00:00:00	2050-01-01 12:00:00	3	1	2023-10-29 23:24:30	rY1K7R
	4	708	Sport-100 Helmet, Black	12.0278	2019-05-31 00:00:00	2020-05-30 00:00:00	1	0	2023-10-29 23:24:30	rY1K7R
	5	708	Sport-100 Helmet, Black	13.8782	2020-05-30 00:00:00	2021-05-30 00:00:00	2	0	2023-10-29 23:24:30	rY1K7R
	6	708	Sport-100 Helmet, Black	13.0863	2021-05-30 00:00:00	2050-01-01 12:00:00	3	1	2023-10-29 23:24:30	rY1K7R
	7	709	Mountain Bike-V3	4.3963	2018-03-31 00:00:00	2019-05-31 00:00:00	1	0	2023-10-29 23:24:30	rY1K7R
	8	709	Mountain Bike Socks, M	3.3963	2019-05-31 00:00:00	2019-05-31 00:00:00	2	0	2023-10-29 23:24:30	rY1K7R
	9	709	Mountain Bike	3.3963	2019-05-31 00:00:00	2020-01-15 00:00:00	3	0	2023-10-29 23:24:30	rY1K7R
	10	709	Mountain Bike Socks-2, M	5.3963	2020-01-15 00:00:00	2020-01-15 00:00:00	4	0	2023-10-29 23:24:30	rY1K7R
	11	709	Mountain Bike-V3	5.3963	2020-01-15 00:00:00	2022-03-31 00:00:00	5	0	2023-10-29 23:24:30	rY1K7R
	12	709	Mountain Bike-V3	4.3963	2022-03-31 00:00:00	2050-01-01 12:00:00	6	1	2023-10-29 23:24:30	rY1K7R
	13	710	Mountain Bike Socks, L	3.3963	2019-05-31 00:00:00	2050-01-01 12:00:00	1	1	2023-10-29 23:24:30	rY1K7R
	14	711	Sport-100 Helmet, Blue	12.0278	2019-05-31 00:00:00	2020-05-30 00:00:00	1	0	2023-10-29 23:24:30	rY1K7R
	15	711	Sport-100 Helmet, Blue	13.8782	2020-05-30 00:00:00	2021-05-30 00:00:00	2	0	2023-10-29 23:24:30	rY1K7R
	16	711	Sport-100 Helmet, Blue	13.0863	2021-05-30 00:00:00	2050-01-01 12:00:00	3	1	2023-10-29 23:24:30	rY1K7R
	17	712	AWC Logo Cap	5.7052	2019-05-31 00:00:00	2020-05-30 00:00:00	1	0	2023-10-29 23:24:30	rY1K7R
	18	712	AWC Logo Cap	5.2297	2020-05-30 00:00:00	2021-05-30 00:00:00	2	0	2023-10-29 23:24:30	rY1K7R
	19	712	AWC Logo Cap	5.8723	2021-05-30 00:00:00	2050-01-01 12:00:00	3	1	2023-10-29 23:24:30	rY1K7R

```
1 • select * from etl_job_log;
```

Result Grid					
		Filter Rows:		Edit:	
	job_log_id	job_id	job_status	created_by	created_date
▶	17	2	Running	amey8	2023-10-29 23:24:30
	18	2	Completed	amey8	2023-10-29 23:24:31
	19	1	Running	amey8	2023-10-29 23:24:31
	20	1	Completed	amey8	2023-10-29 23:24:34
•	NULL	NULL	NULL	NULL	NULL