LARUTAN CAP BADAK GROUP

Project Data Warehouse & BI

Credit Card Applicant

LARUTAN CAP BADAK GROUP

Member of Group

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LARUTAN CAP BADAK GROUP

Table of Content

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Dataset

application_record.csv

- **ID** : Client number
- **CODE_GENDER** : Gender
- **FLAG_OWN_CAR** : Is there a car
- **FLAG_OWN-REALTY** :: Is there a property
- **CNT_CHILDREN** : Number of children
- **AMT_INCOME_TOTAL** : Annual income
- **NAME_INCOME_TYPE** : Income category
- **NAME_EDUCATION_TYPE** : Education level
- **NAME_FAMILY_STATUS** : Marital status
- **NAME_HOUSING_TYPE** : Way of living
- **DAYS_BIRTH** : Birthday | *Count backwards from current day (0), -1 means yesterday*
- **DAYS_EMPLOYED** : Start date of employment | *Count backwards from current day(0). If positive, it means the person currently unemployed.*
- **FLAG_MOBIL** : Is there a mobile phone
- **FLAG_WORK_PHONE** : Is there a work phone
- **FLAG_PHONE** : Is there a phone
- **FLAG_EMAIL** : Is there an email
- **OCCUPATION_TYPE** : Occupation
- **CNT_FAM_MEMBERS** : Family size

LARUTAN CAP BADAK GROUP

Dataset

credit_record.csv

- **ID** : Client number
- **MONTHS_BALANCE** : Record month | *The month of the extracted data is the starting point, backwards, 0 is the current month, -1 is the previous month, and so on.*
- **STATUS** : Status | 0 is 1-29 days past due, 1 is 30-59 days past due, 2 is 60-89 days overdue, 3 is 90-119 days overdue, 4 is 120-149 days overdue, 5 is Overdue or bad debts, write-offs for more than 150 days, C is paid off that month, X is No loan for the month.

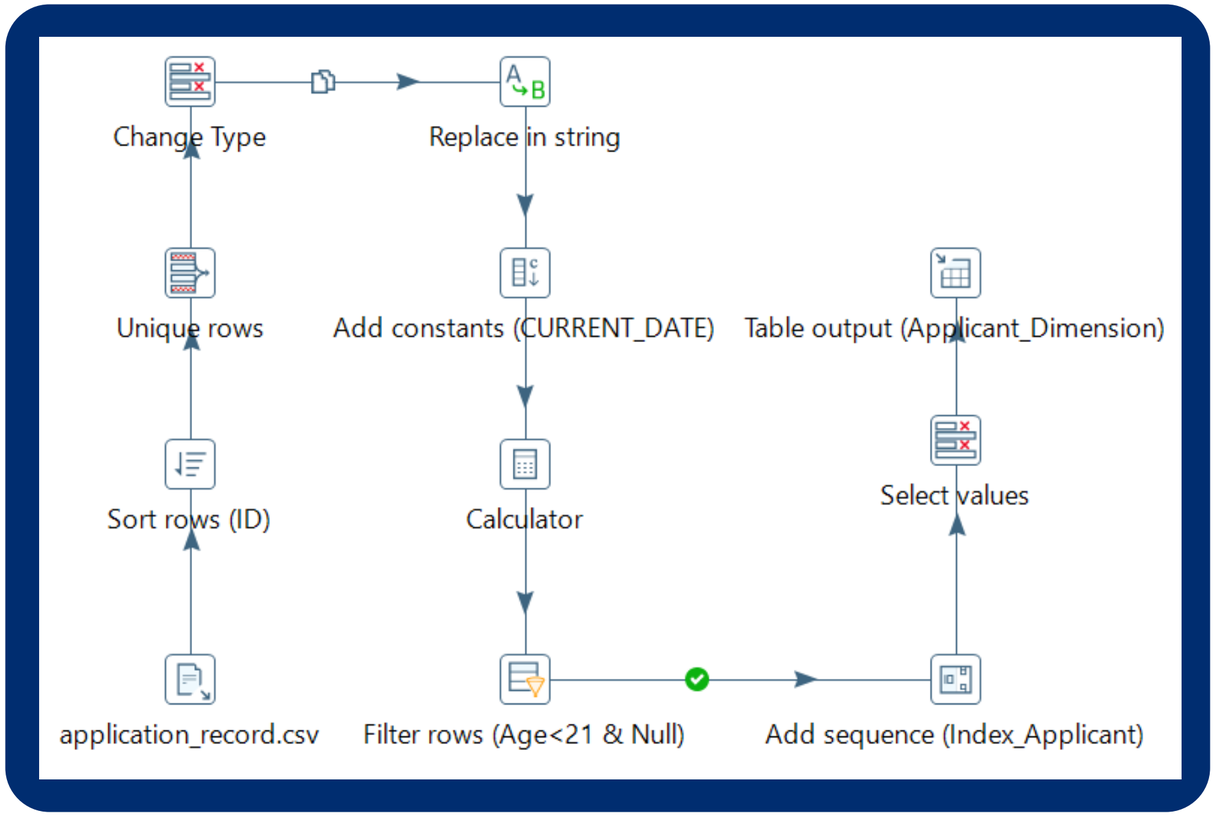
LARUTAN CAP BADAK GROUP

ETL Process

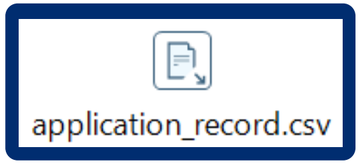
01

Applicant_Dimension

Applicant_Dimension



Applicant_Dimension (1)



Importing application table from your OLTP DB.

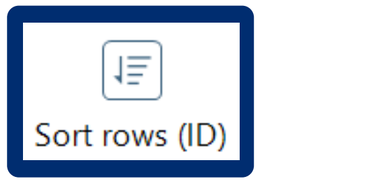
CSV file input

Step name	application_record.csv
Filename	D:__KULIAH__\SEM 7\MBKM\Big Data & Business Intelligence - Celerates\W8 - ETL Pentaho & Data Warehouse\application_record.csv (Browse...)
Delimiter	, (Insert TAB)
Enclosure	"
NIO buffer size	1000
Lazy conversion?	☑
Header row present?	☑
Add filename to result	☐
The row number field name (optional)	
Running in parallel?	☐
New line possible in fields?	☐
Format	mixed
File encoding	

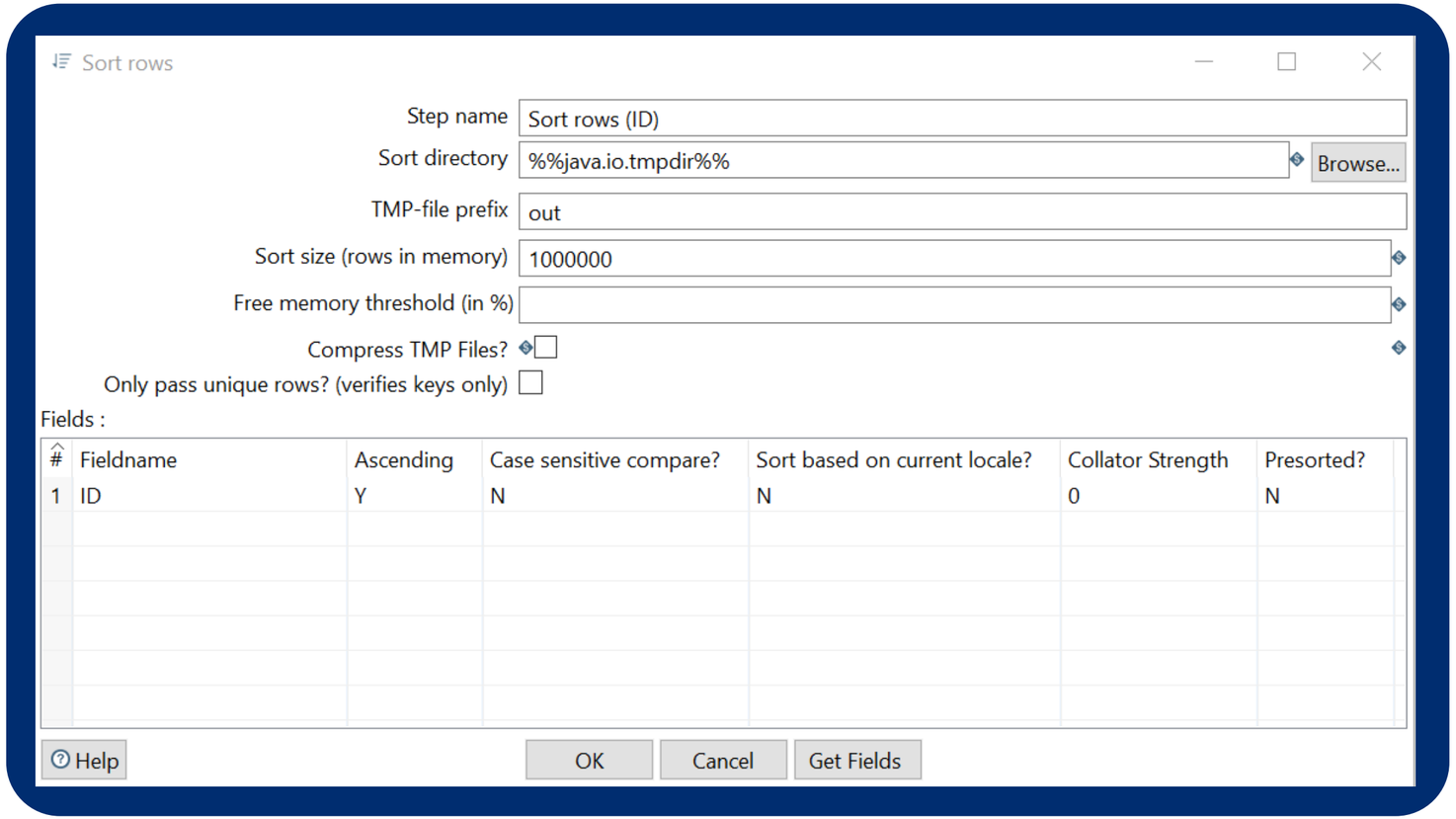
#	Name	Type	Format	Length	Precision	Currency	Decimal	Group	Trim type
1	ID	Integer	#	15	0	IDR	.	,	none
2	CODE_GENDER	String		1		IDR	.	,	none
3	FLAG_OWN_CAR	Boolean				IDR	.	,	none
4	FLAG_OWN_REALTY	Boolean				IDR	.	,	none
5	CNT_CHILDREN	Integer	#	15	0	IDR	.	,	none
6	AMT_INCOME_TOTAL	Number	#.#	8	1	IDR	.	,	none
7	NAME_INCOME_TYPE	String		20		IDR	.	,	none
8	NAME_EDUCATION_TYPE	String		29		IDR	.	,	none
9	NAME_FAMILY_STATUS	String		20		IDR	.	,	none
10	NAME_HOUSING_TYPE	String		17		IDR	.	,	none
11	DAYS_BIRTH	Integer	#	15	0	IDR	.	,	none
12	DAYS_EMPLOYED	Integer	#	15	0	IDR	.	,	none
13	FLAG_MOBIL	Integer	#	15	0	IDR	.	,	none
14	FLAG_WORK_PHONE	Integer	#	15	0	IDR	.	,	none
15	FLAG_PHONE	Integer	#	15	0	IDR	.	,	none
16	FLAG_EMAIL	Integer	#	15	0	IDR	.	,	none
17	OCCUPATION_TYPE	String		14		IDR	.	,	none
18	CNT_FAM_MEMBERS	Number	#.#	3	1	IDR	.	,	none

Help | OK | Get Fields | Preview | Cancel

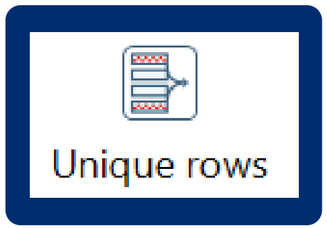
Applicant_Dimension (2)



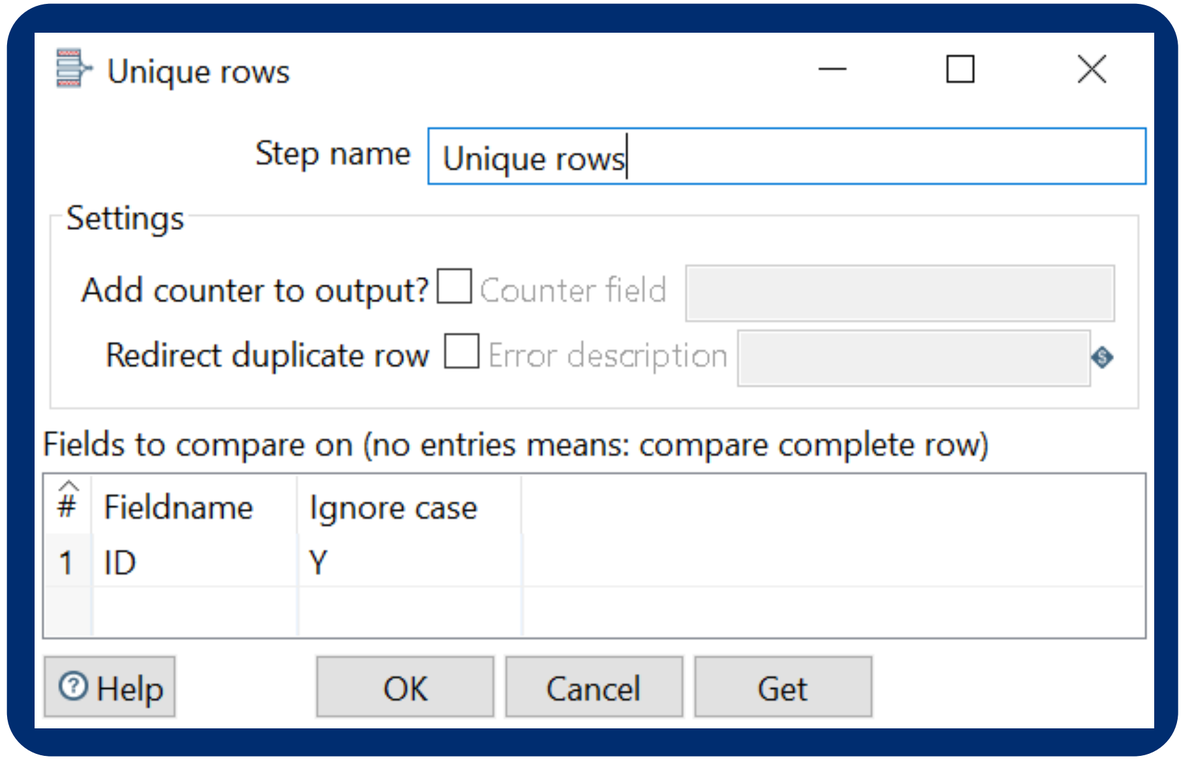
Sort data based on applicant ID.



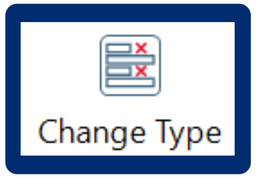
Applicant_Dimension (3)

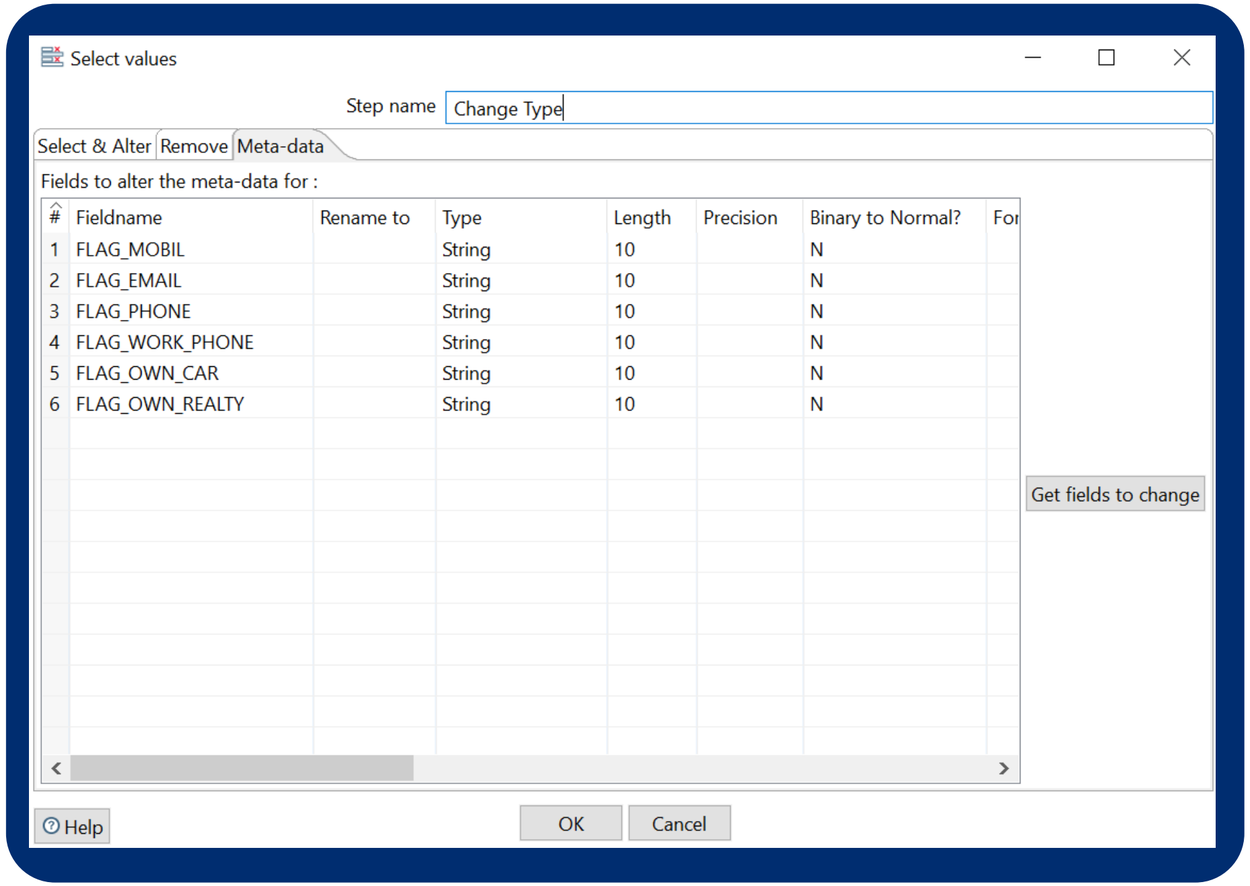


Filter duplicate applicant ID.



Applicant_Dimension (4)

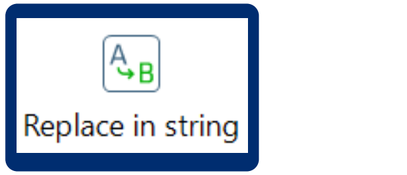




Replace some values from Flag_* field to make it easier to understand.

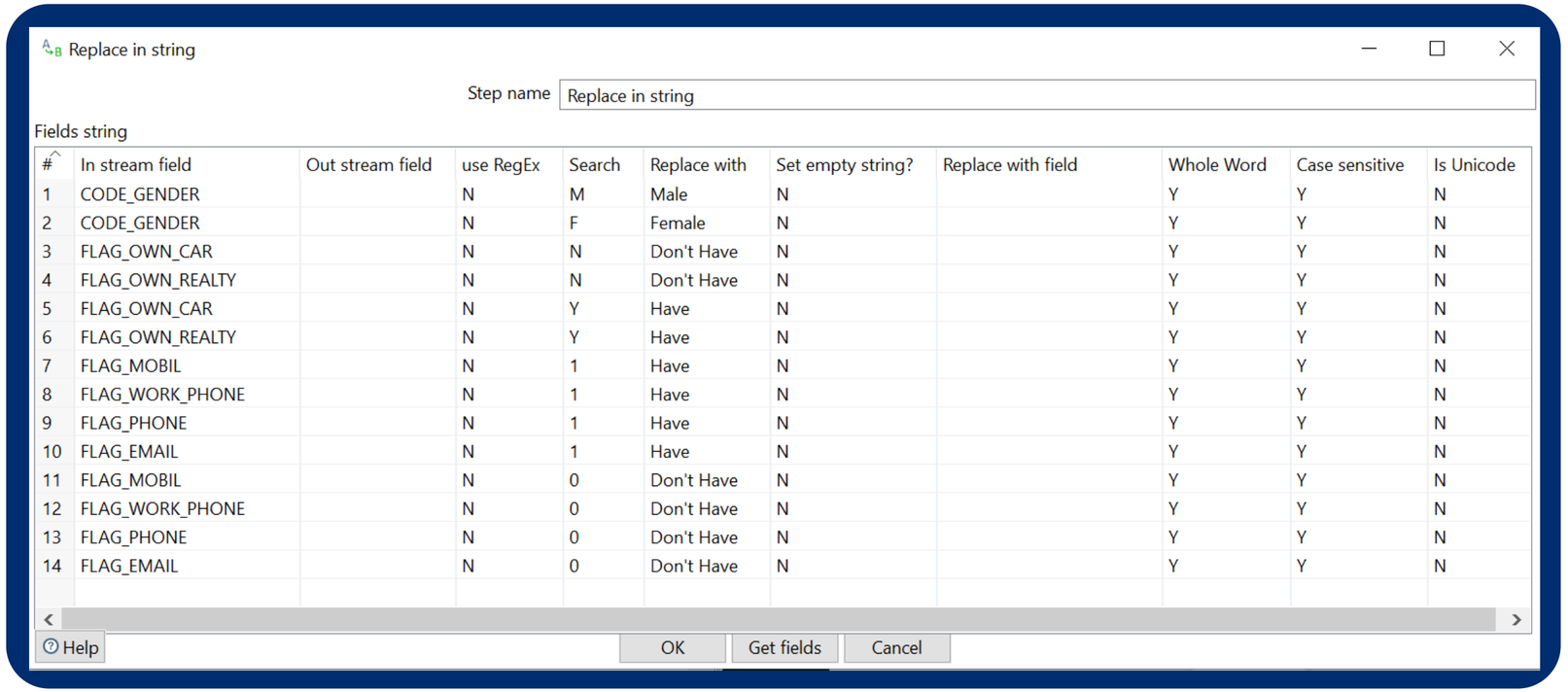
Field	Current Value	Replace With
Gender	M	Male
Gender	Y	Female
Owner_car, Owner_realty	N	Don't Have
Owner_car, Owner_realty	Y	Have
Mobil, Work_phone, Phone, Email	1	Have
Mobil, Work_phone, Phone, Email	0	Don't Have

Applicant_Dimension (5)



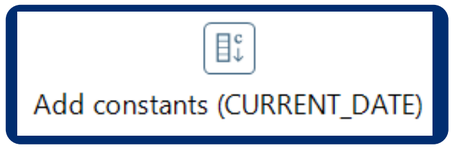
Replace some values from Flag_* field to make it easier to understand. (Cont.)

Field	Current Value	Replace With
Gender	M	Male
Gender	Y	Female
Owner_car, Owner_realty	N	Don't Have
Owner_car, Owner_realty	Y	Have
Mobil, Work_phone, Phone, Email	1	Have
Mobil, Work_phone, Phone, Email	0	Don't Have

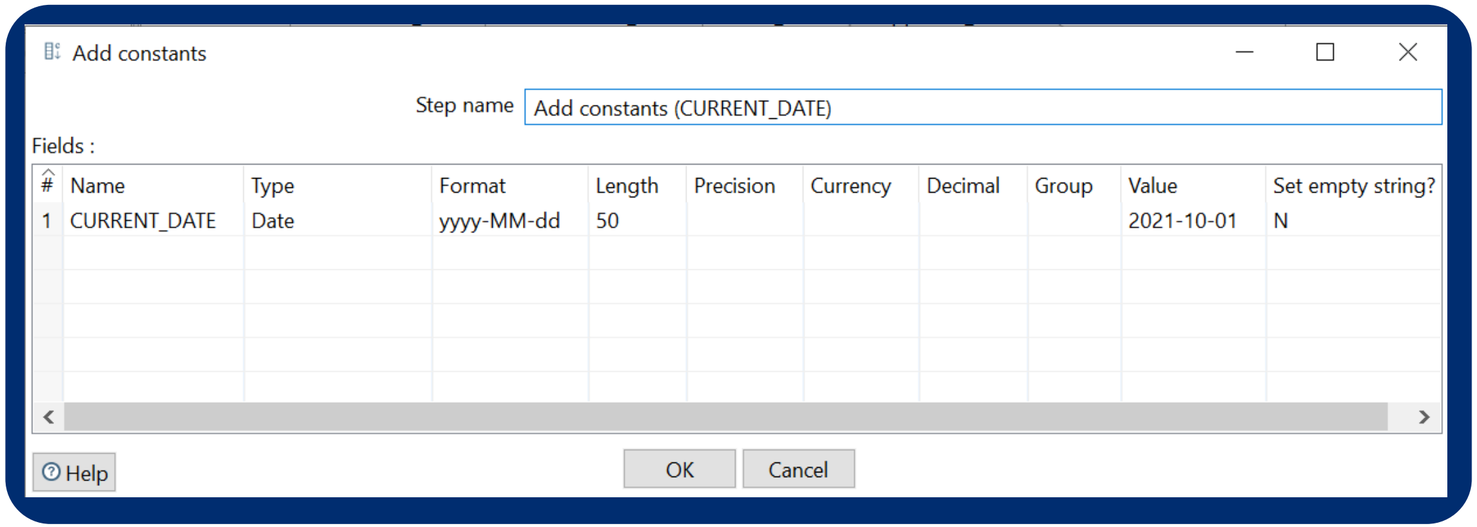


#	In stream field	Out stream field	use RegEx	Search	Replace with	Set empty string?	Replace with field	Whole Word	Case sensitive	Is Unicode
1	CODE_GENDER		N	M	Male	N		Y	Y	N
2	CODE_GENDER		N	F	Female	N		Y	Y	N
3	FLAG_OWN_CAR		N	N	Don't Have	N		Y	Y	N
4	FLAG_OWN_REALTY		N	N	Don't Have	N		Y	Y	N
5	FLAG_OWN_CAR		N	Y	Have	N		Y	Y	N
6	FLAG_OWN_REALTY		N	Y	Have	N		Y	Y	N
7	FLAG_MOBIL		N	1	Have	N		Y	Y	N
8	FLAG_WORK_PHONE		N	1	Have	N		Y	Y	N
9	FLAG_PHONE		N	1	Have	N		Y	Y	N
10	FLAG_EMAIL		N	1	Have	N		Y	Y	N
11	FLAG_MOBIL		N	0	Don't Have	N		Y	Y	N
12	FLAG_WORK_PHONE		N	0	Don't Have	N		Y	Y	N
13	FLAG_PHONE		N	0	Don't Have	N		Y	Y	N
14	FLAG_EMAIL		N	0	Don't Have	N		Y	Y	N

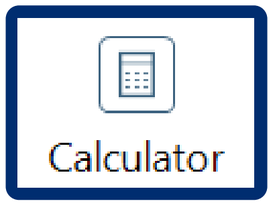
Applicant_Dimension (6)



Add new columns with constant date (October 1, 2021) as Current_Date.



Applicant_Dimension (7)



Calculate DOB and date of applicant start working based on current date (October 1, 2021).
Hint : Date A + Date B

Calculate age of applicant based on current year (2021).
Hint : Year A – Year B

Calculator

Step name

Calculator

Throw an error on non existing files

Fields:

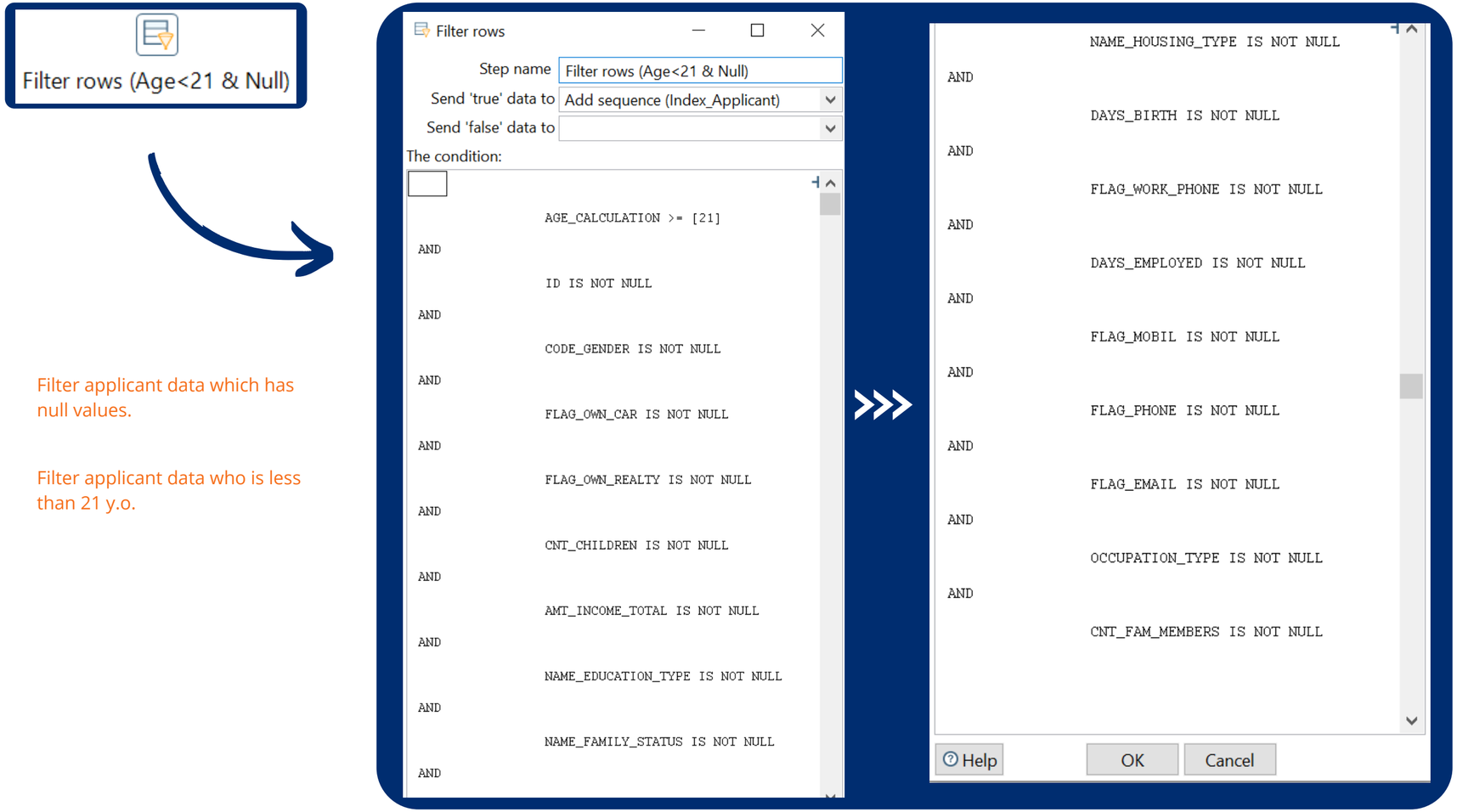
#	New field	Calculation	Field A	Field B	Field C	Value type	Length	Precision	Remove	Conversion mask	Decimal
1	DAYS_BIRTH_2	Date A + B Days	CURRENT_DATE	DAYS_BIRTH		Date	50		N		
2	DAYS_EMPLOYED_2	Date A + B Days	CURRENT_DATE	DAYS_EMPLOYED		Date	50		N		
3	AGE_1	Year of date A	DAYS_BIRTH_2			Integer	2		N		
4	AGE_2	Year of date A	CURRENT_DATE			Integer	2		N		
5	AGE_CALCULATION	A - B	AGE_2	AGE_1		Integer	2		N		

Help

OK

Cancel

Applicant_Dimension (8)

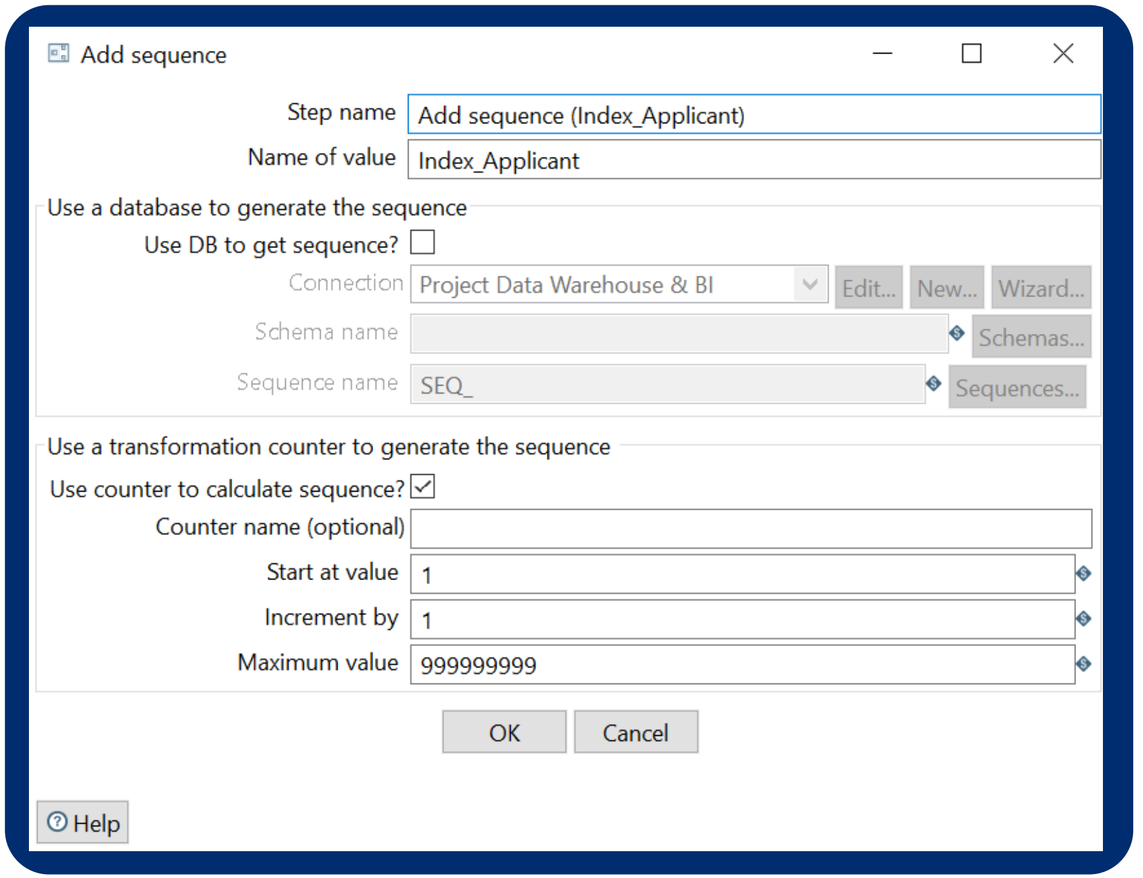


Filter applicant data which has null values.

Filter applicant data who is less than 21 y.o.

Applicant_Dimension (9)

Adding Index_Applicant (to replace ID as primary key).



Applicant_Dimension (10)

Select only selected Value.

Fields to alter the meta-data for :

#	Fieldname	Rename to	Type	Length	Precision
1	Index_Applicant		Integer	10	
2	ID	Applicant_ID	String	10	
3	CODE_GENDER	Applicant_Gender	String	7	
4	CNT_CHILDREN	Total_Children	Integer	2	
5	CNT_FAM_MEMBERS	Total_Family_Members	Integer	2	
6	AGE_CALC	Applicant_Age	Integer	2	
7	DAYS_BIRTH2	Birth_Date	Date	50	
8	DAYS_EMPLOYED2	Employed_Date	Date	50	
9	NAME_EDUCATION_TYPE	Education_Type	String	50	
1..	NAME_FAMILY_STATUS	Family_Status	String	50	
1..	NAME_HOUSING_TYPE	Housing_Type	String	50	
1..	NAME_INCOME_TYPE	Income_Type	String	50	
1..	OCCUPATION_TYPE	Job_Title	String	50	
1..	AMT_INCOME_TOTAL	Total_Income	Integer	10	
1..	FLAG_EMAIL	Owned_Email	String	10	
1..	FLAG_MOBIL	Owned_Mobile_Phone	String	10	
1..	FLAG_OWN_CAR	Owned_Car	String	10	
1..	FLAG_OWN_REALTY	Owned_Realty	String	10	
1..	FLAG_PHONE	Owned_Phone	String	10	
2..	FLAG_WORK_PHONE	Owned_Work_Phone	String	10	

Select values

Step name: Select values

Select & Alter | Remove | Meta-data

Fields to alter the meta-data for :

#	Fieldname	Rename to	Type	Length	Precision	Binary to N
1	Index_Applicant		Integer	10		N
2	ID	Applicant_ID	String	10		N
3	CODE_GENDER	Applicant_Gender	String	7		N
4	CNT_CHILDREN	Total_Children	Integer	2		N
5	CNT_FAM_MEMBERS	Total_Family_Members	Integer	2		N
6	AGE_CALCULATION	Applicant_Age	Integer	2		N
7	DAYS_BIRTH_2	Birth_Date	Date	50		N
8	DAYS_EMPLOYED_2	Employed_Date	Date	50		N
9	NAME_EDUCATION_TYPE	Education_Type	String	50		N
10	NAME_FAMILY_STATUS	Family_Status	String	50		N
11	NAME_HOUSING_TYPE	Housing_Type	String	50		N
12	NAME_INCOME_TYPE	Income_Type	String	50		N
13	OCCUPATION_TYPE	Job_Title	String	50		N
14	AMT_INCOME_TOTAL	Total_Income	Integer	10		N
15	FLAG_EMAIL	Owned_Email	String	10		N
16	FLAG_MOBIL	Owned_Mobile_Phone	String	10		N
17	FLAG_OWN_CAR	Owned_Car	String	10		N
18	FLAG_OWN_REALTY	Owned_Realty	String	10		N
19	FLAG_PHONE	Owned_Phone	String	10		N
20	FLAG_WORK_PHONE	Owned_Work_Phone	String	10		N

Get fields to change

Help | OK | Cancel

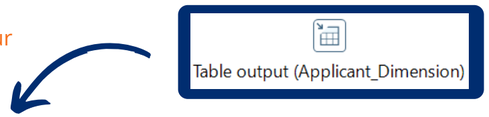
Select & Alter | Remove | Meta-data

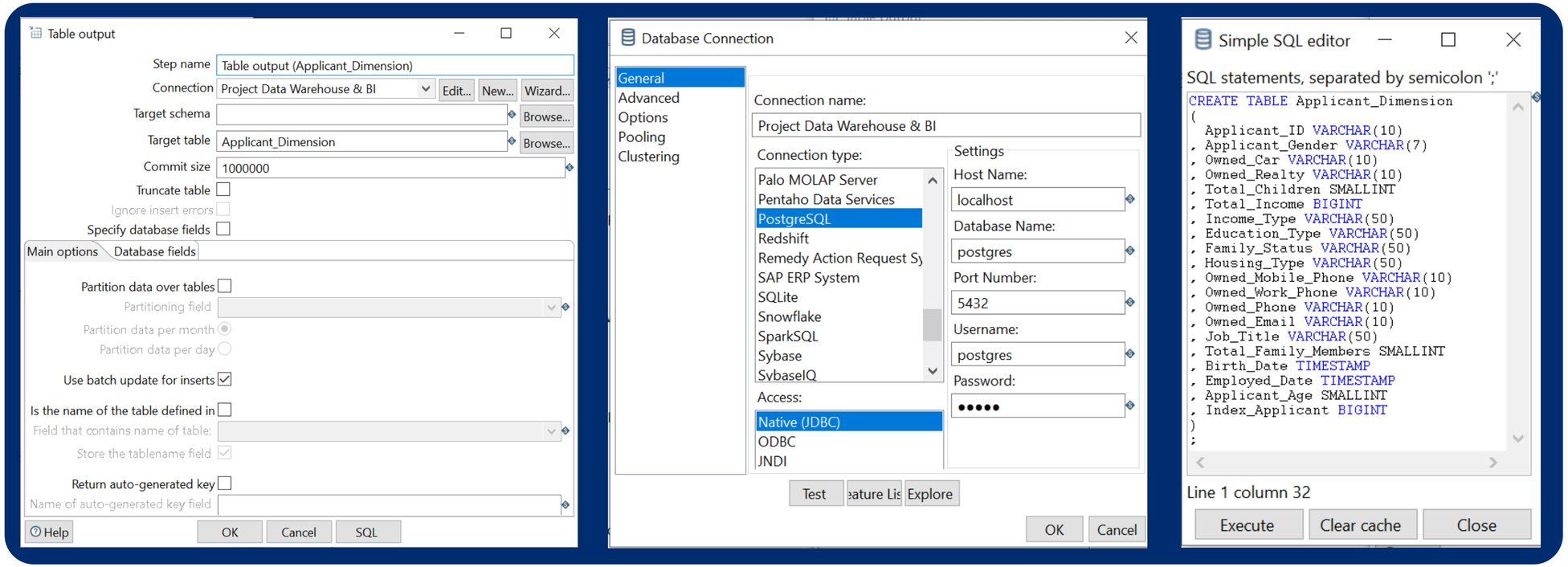
Fields to remove :

#	Fieldname
1	DAYS_BIRTH
2	DAYS_EMPLOYED
3	CURRENT_DATE
4	AGE_1
5	AGE_2

Applicant_Dimension (11)

Export to OLAP DB on your RDBMS.

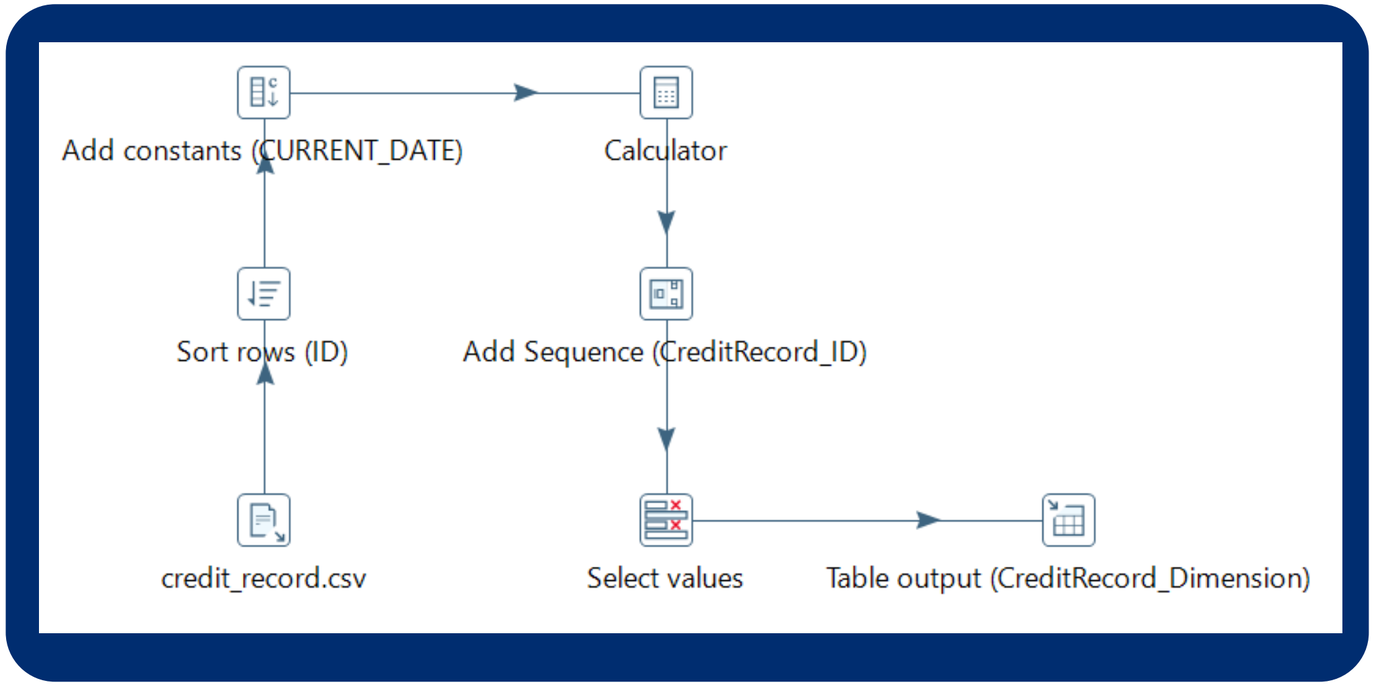




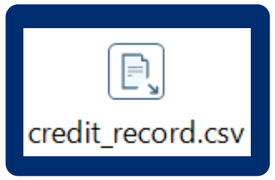
02

CreditRecord_Dimension

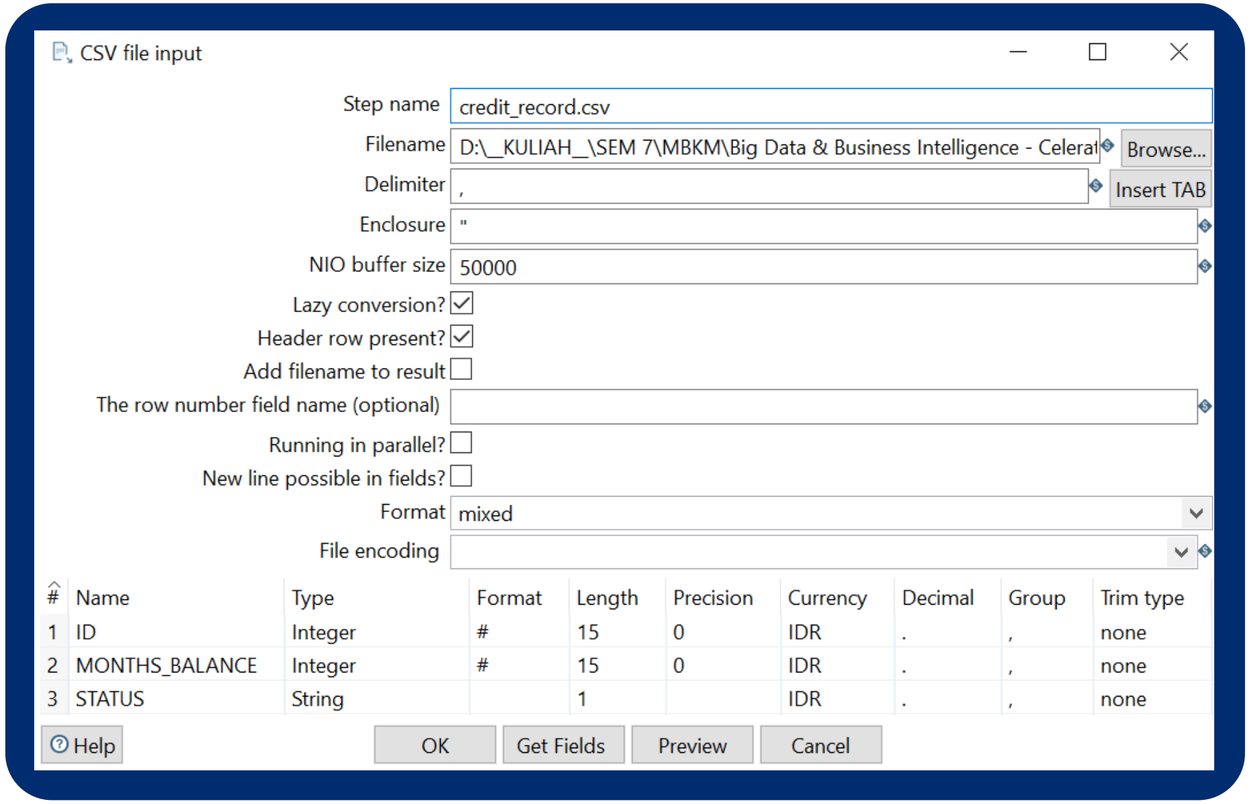
CreditRecord_Dimension



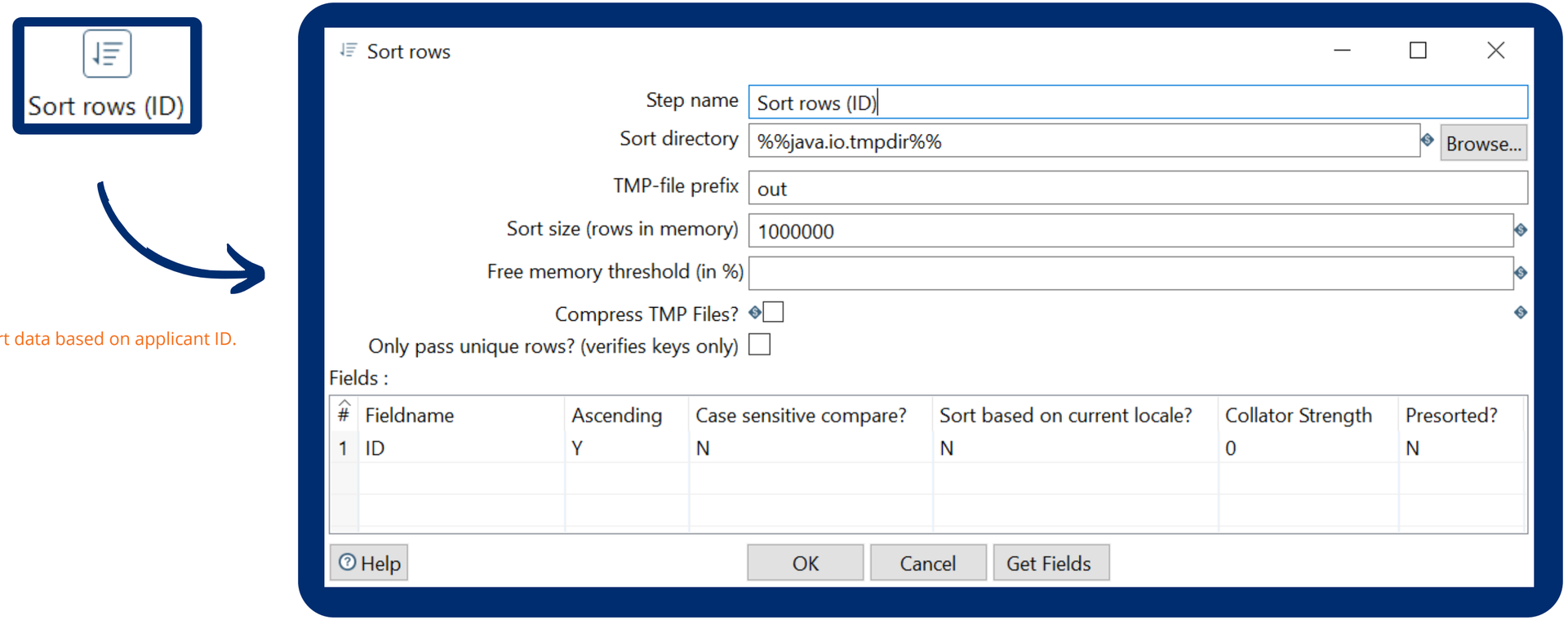
CreditRecord_Dimension (1)



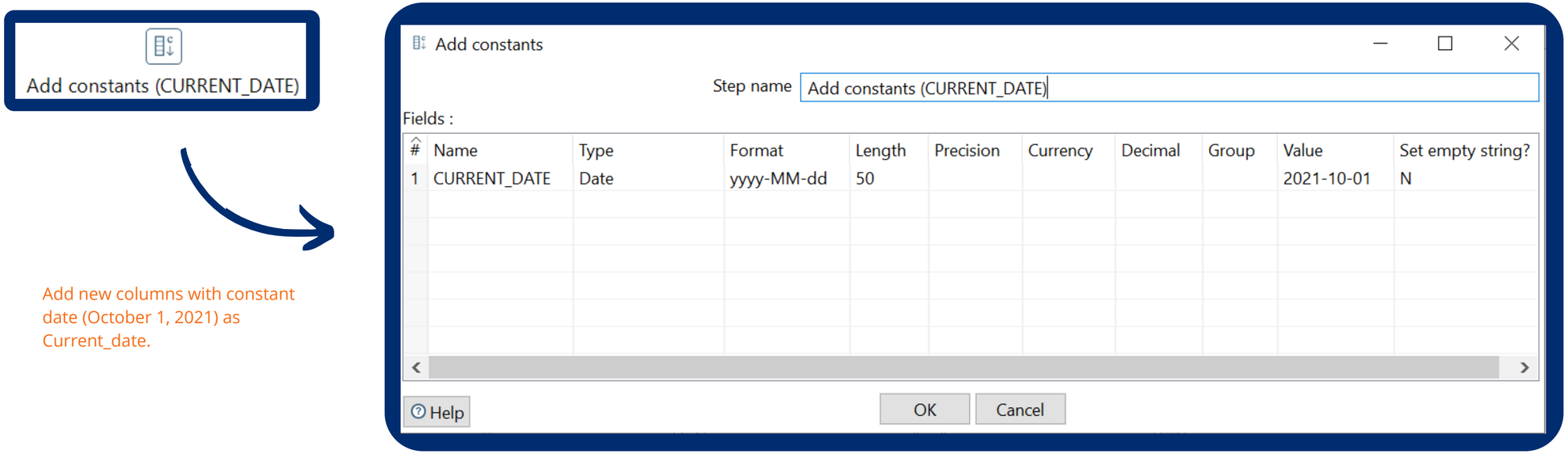
Importing credit record table from your OLTP DB.



CreditRecord_Dimension (2)

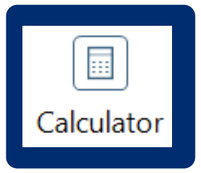


CreditRecord_Dimension (3)

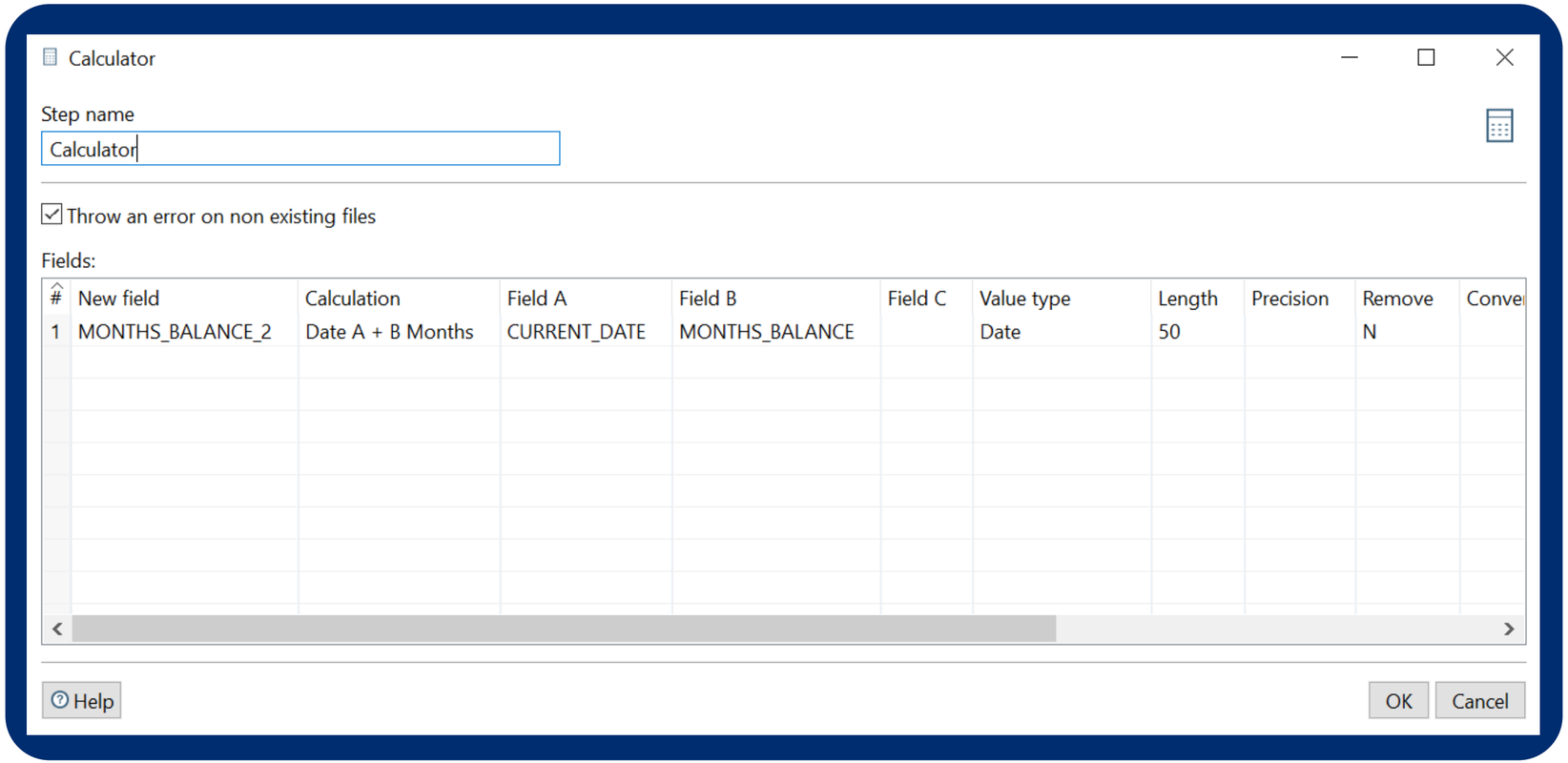


Add new columns with constant date (October 1, 2021) as Current_date.

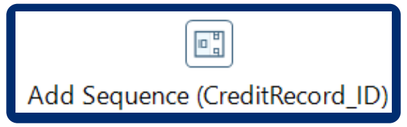
CreditRecord_Dimension (4)



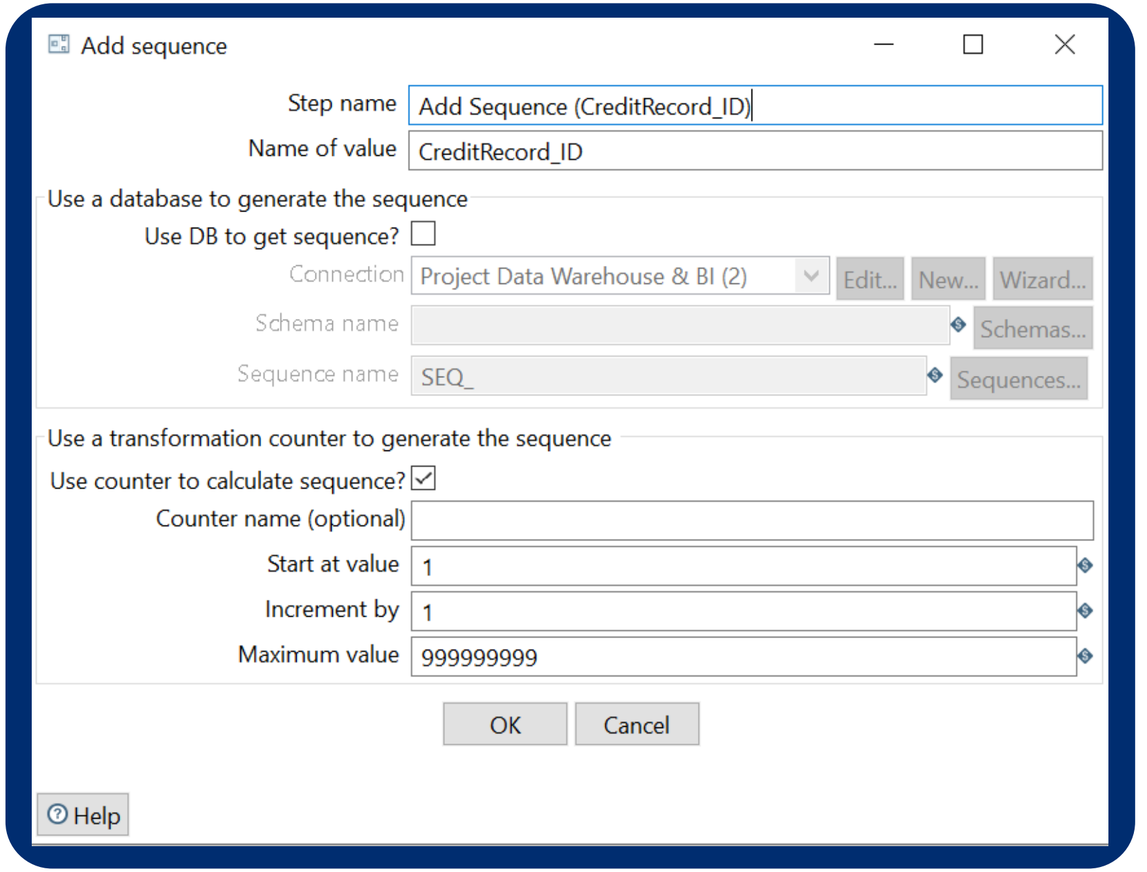
Calculate loan payment's month based on current date (October 1, 2021).



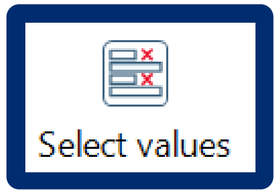
CreditRecord_Dimension (5)



Adding CreditRecord_ID (to replace Applicant ID as primary key).



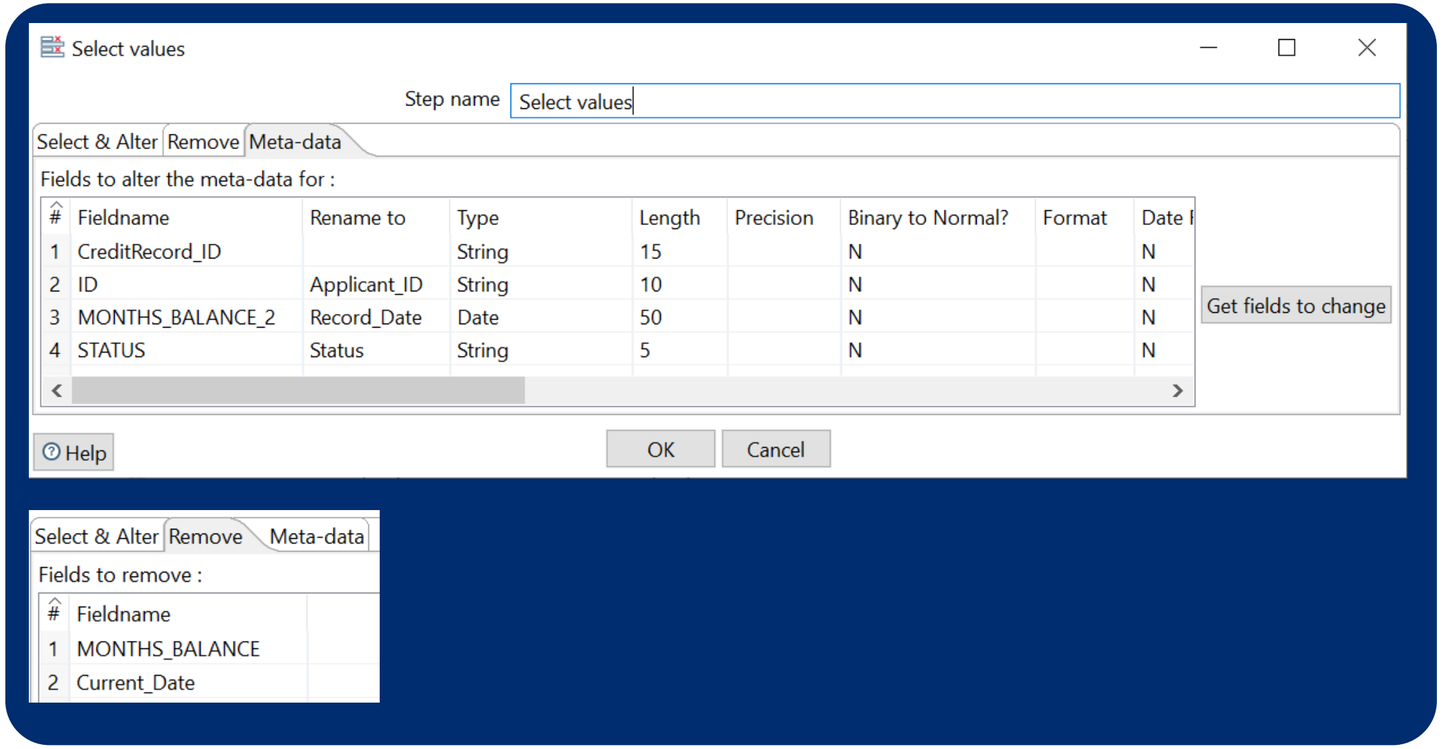
CreditRecord_Dimension (6)



Select only selected Value.

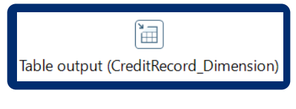
Fields to alter the meta-data for :

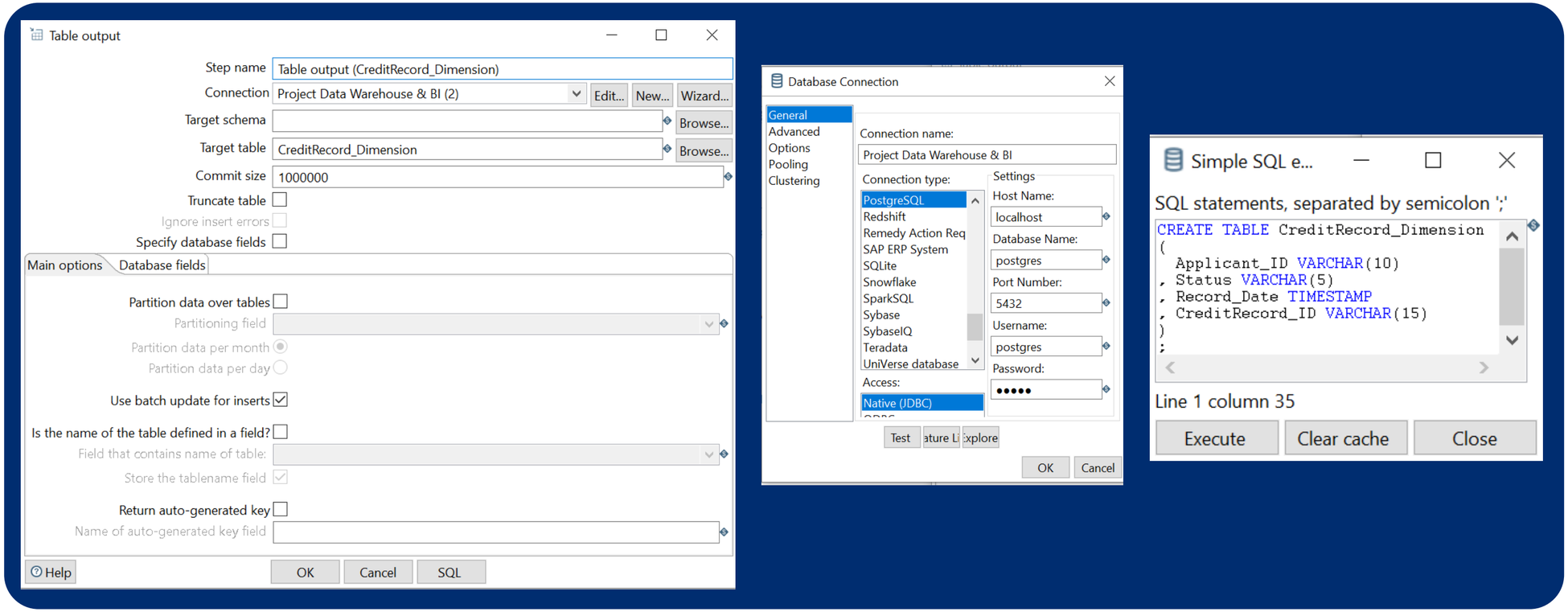
#	Fieldname	Rename to	Type	Length	Precision	Binary to N
1	CreditRecord_ID		String	15		N
2	ID	Applicant_ID	String	10		N
3	MONTHS_BALANCE2	Record_Date	Date	50		N
4	STATUS	Status	String	5		N



CreditRecord_Dimension (7)

Export to OLAP DB on your RDBMS.

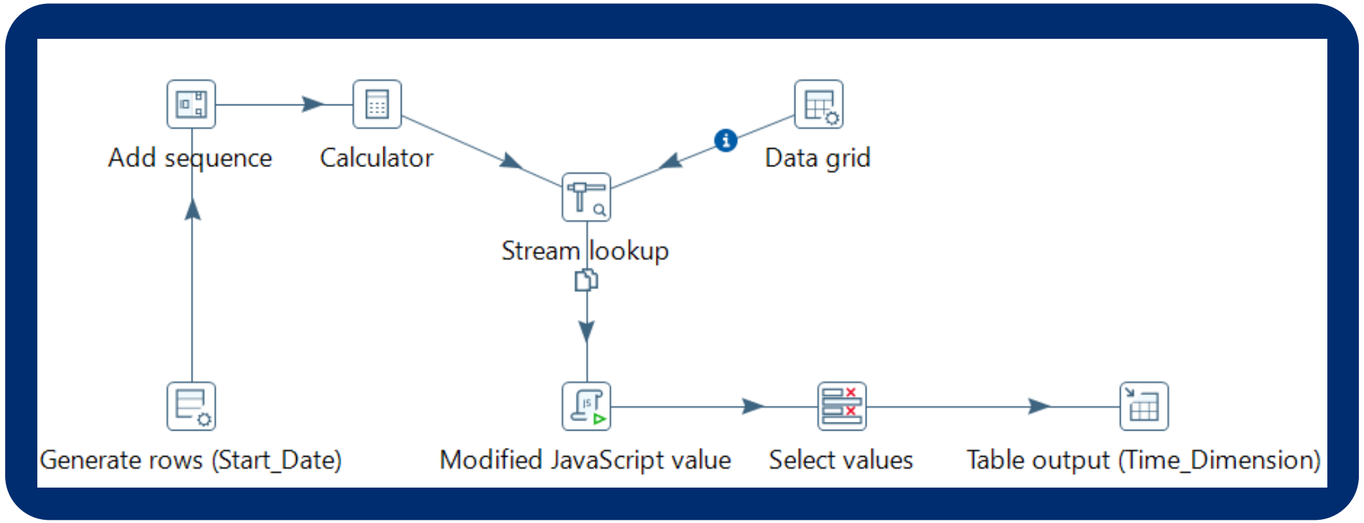




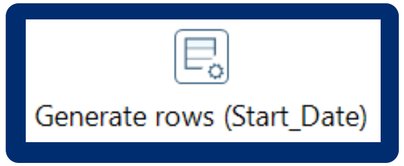
03

Time_Dimension

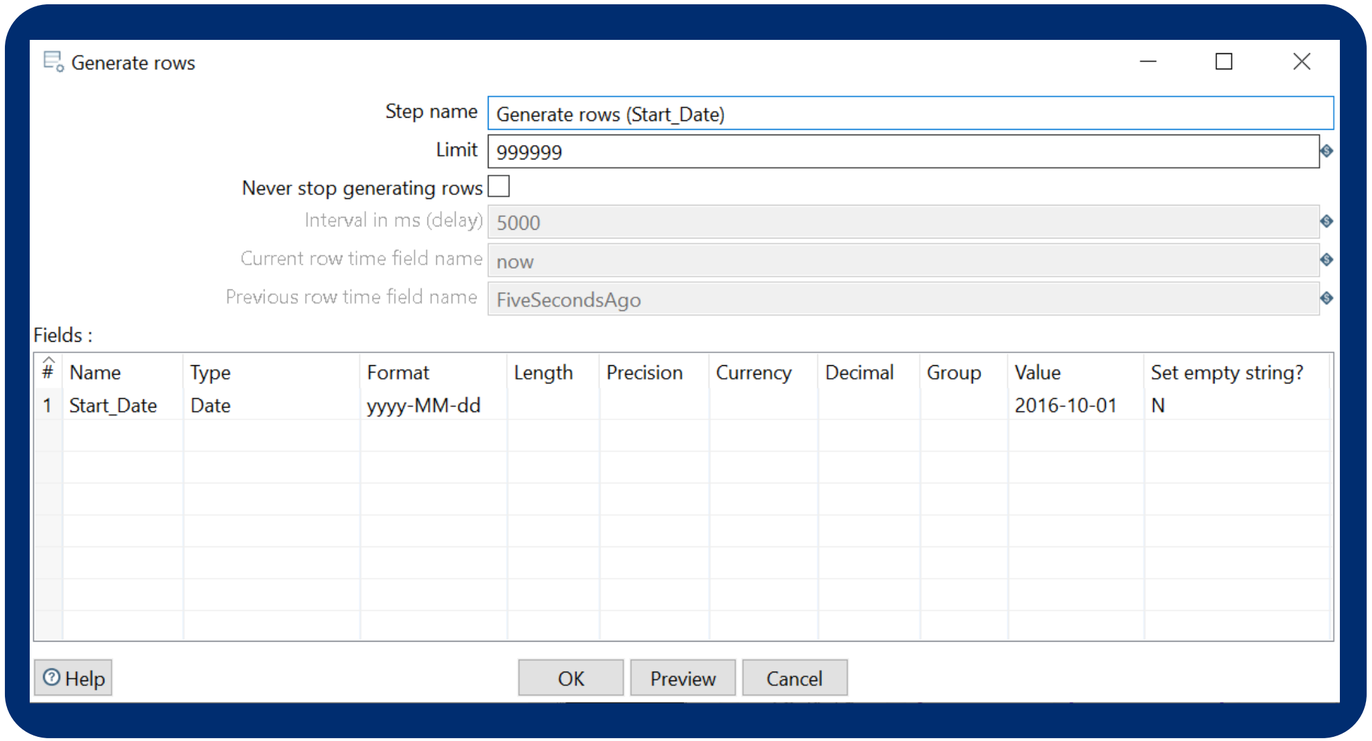
Time_Dimension



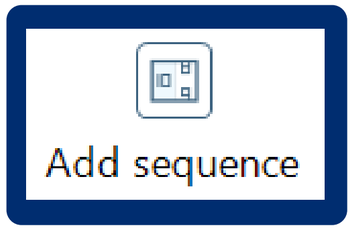
Time_Dimension (1)



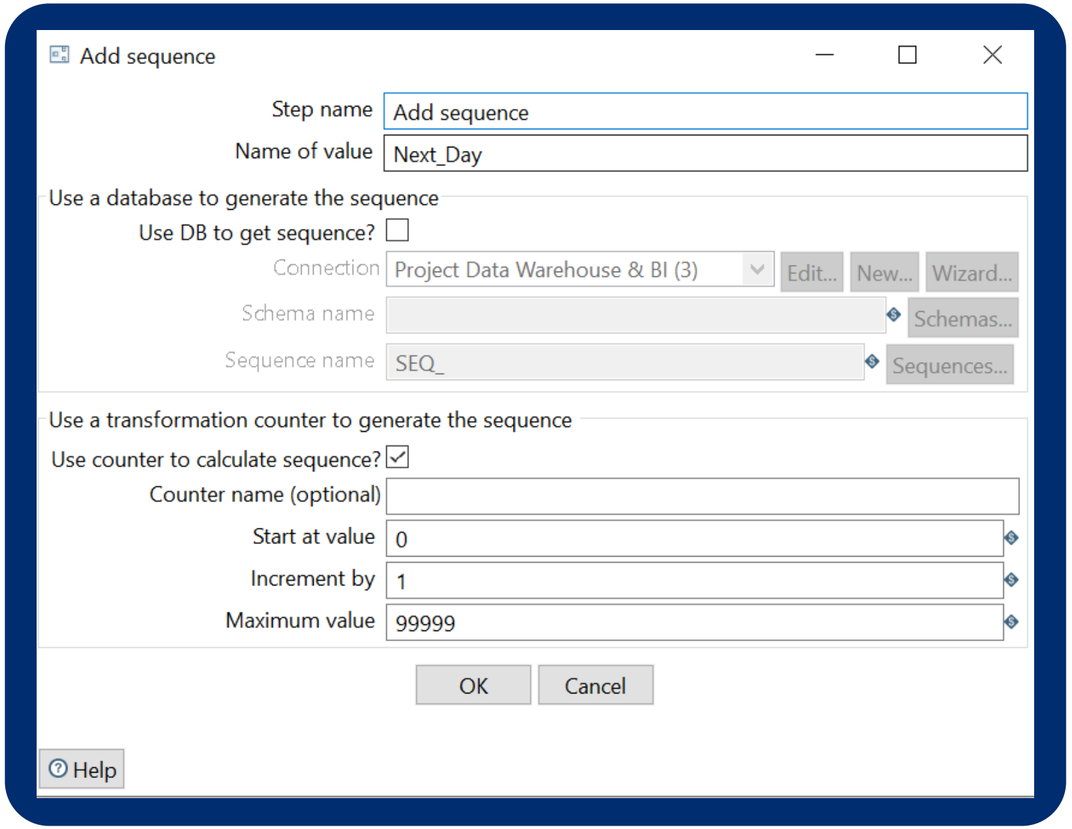
Generate a column with specific date (January 1, 2016) as Start_Date.



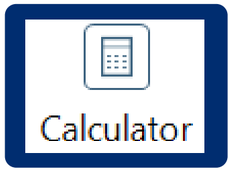
Time_Dimension (2)



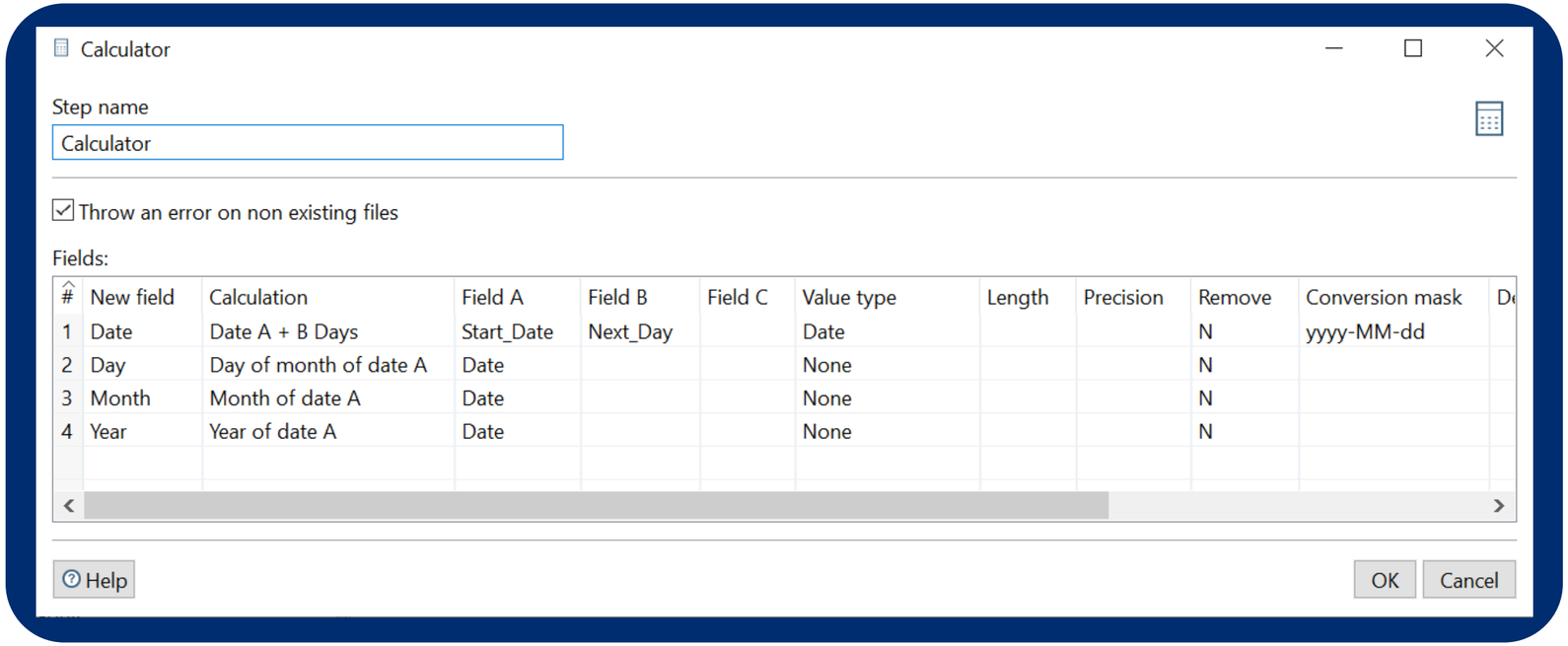
Add row with sequence
from 1 to 99999.



Time_Dimension (3)

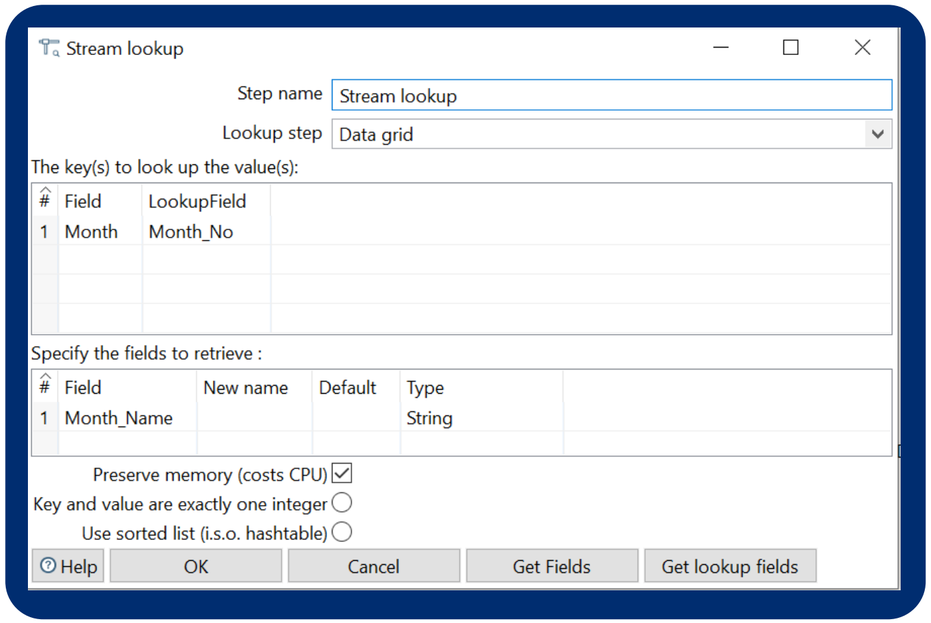


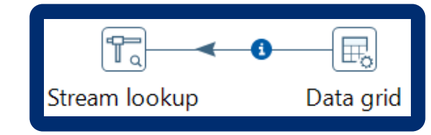
Calculating start date with sequence data to make next_date (ex: January 2, 2016; January 3, 2016).



#	New field	Calculation	Field A	Field B	Field C	Value type	Length	Precision	Remove	Conversion mask	De
1	Date	Date A + B Days	Start_Date	Next_Day		Date			N	yyyy-MM-dd	
2	Day	Day of month of date A	Date			None			N		
3	Month	Month of date A	Date			None			N		
4	Year	Year of date A	Date			None			N		

Time_Dimension (4)

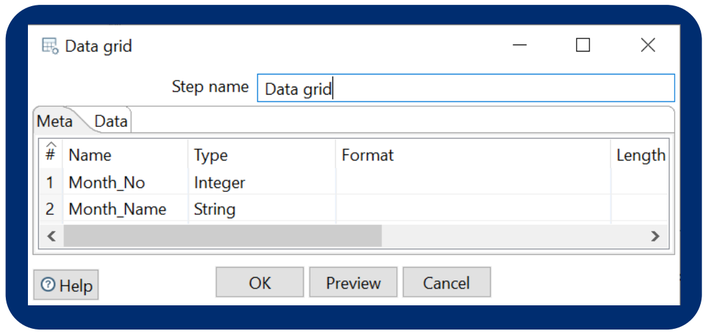




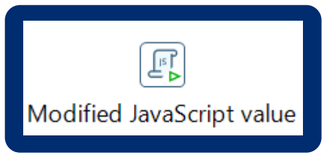
Creating new columns (Day, Months, and Year).

Creating month number and month name.
1 for Januari
2 for Februari
.
.
12 for December

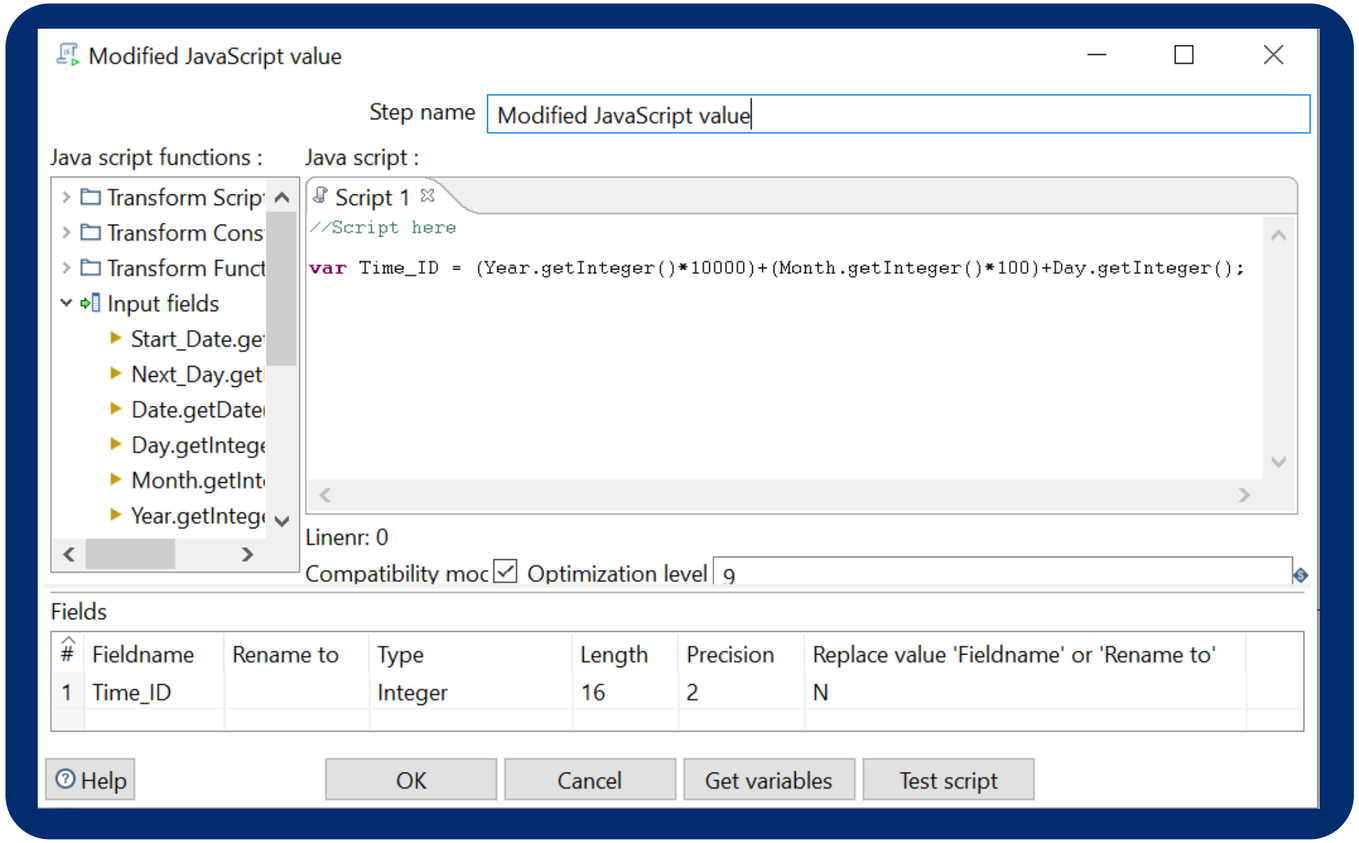
Combine 'Month' from Calculator node to 'No_Month' from Data Grid node.



Time_Dimension (5)



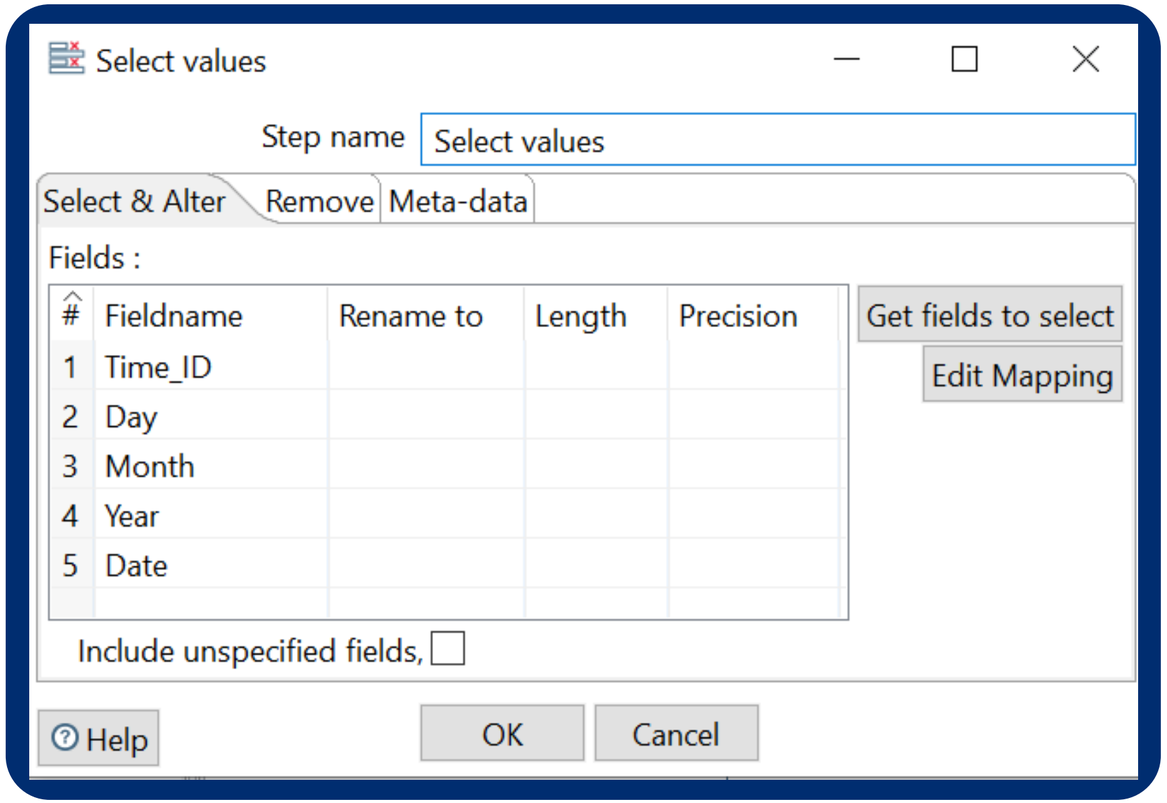
Creating time ID using JavaScript code.
Expected output : 20161001,20161002,...



Time_Dimension (6)

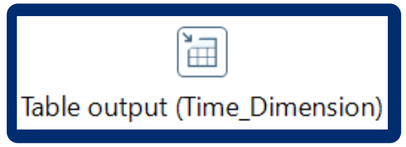
Select only selected Value.

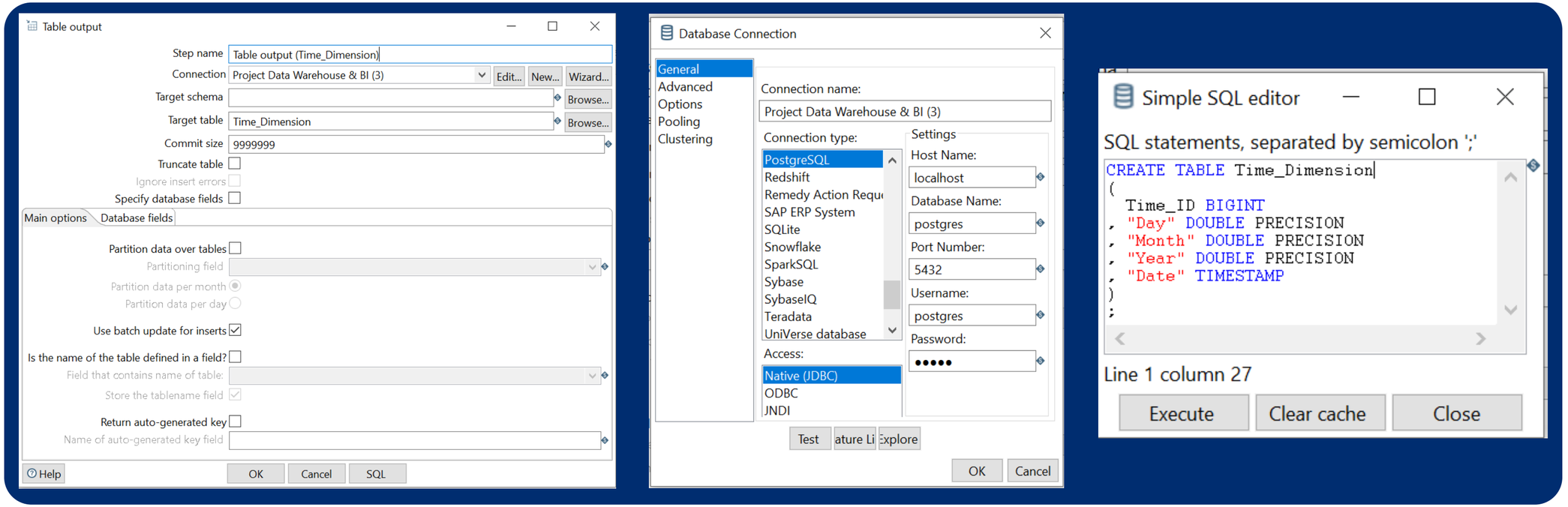
#	Fieldname	Rename to	Length	Precision
1	Time_ID			
2	Day			
3	Month			
4	Year			
5	Date			



Time_Dimension (7)

Export to OLAP DB on your RDBMS.

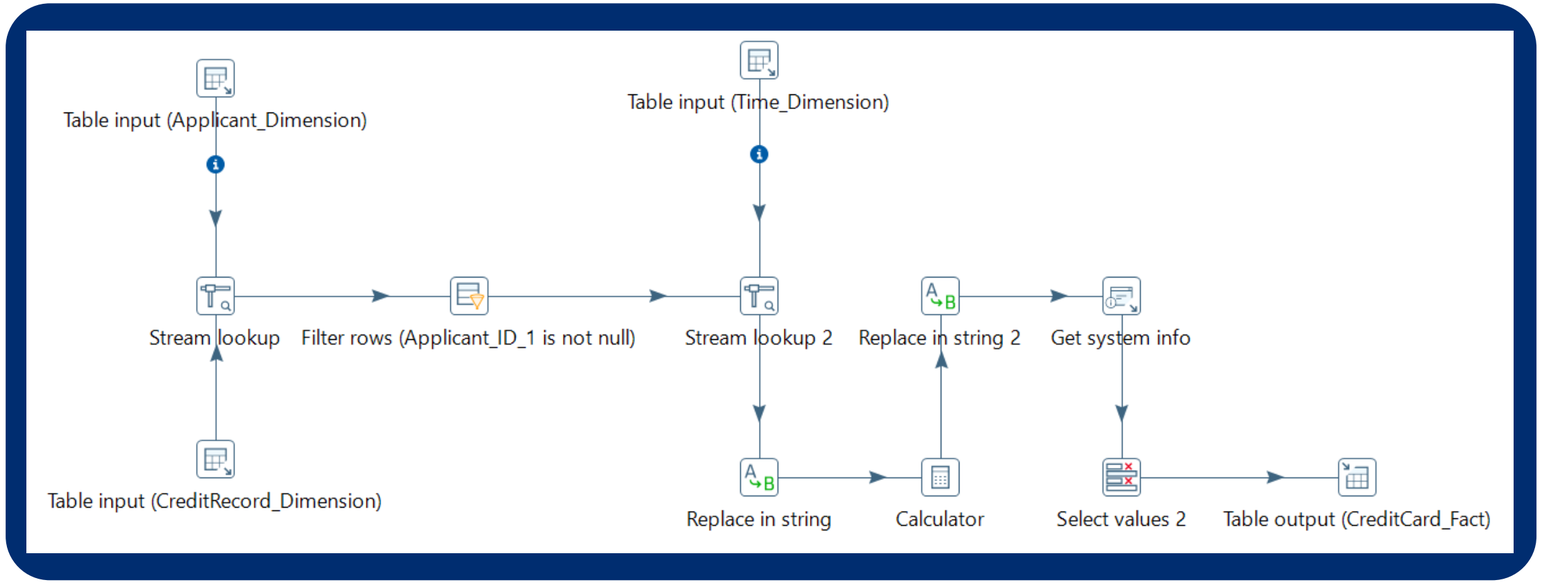




04

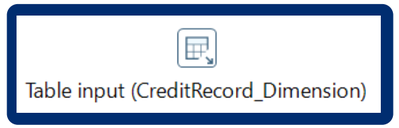
CreditCard_Fact

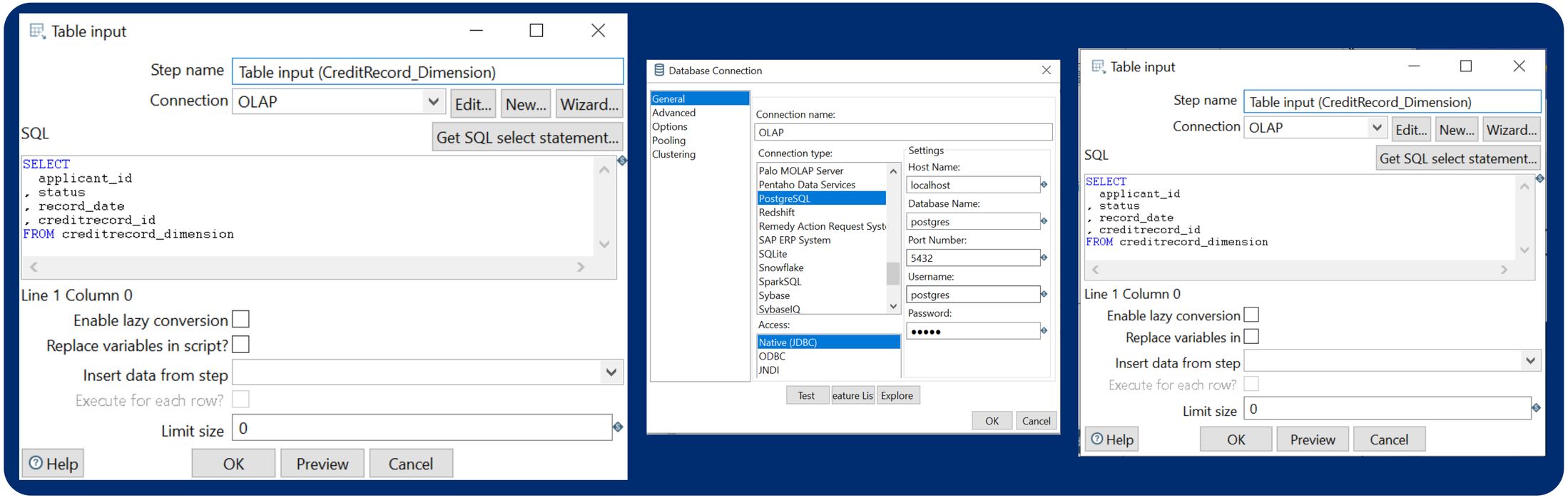
CreditCard_Fact



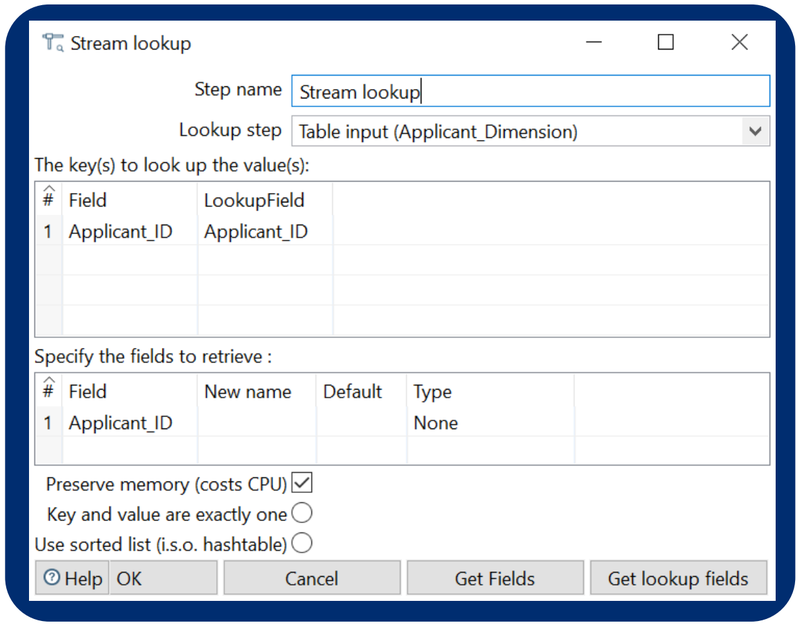
CreditCard_Fact (1)

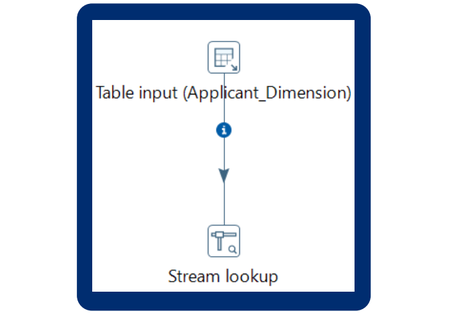
Importing Credit Record dimension from OLAP.





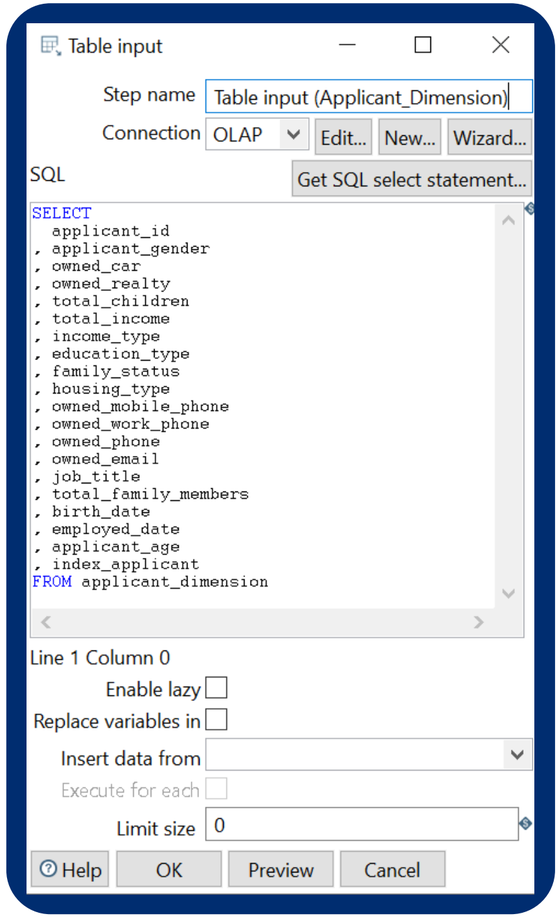
CreditCard_Fact (2)



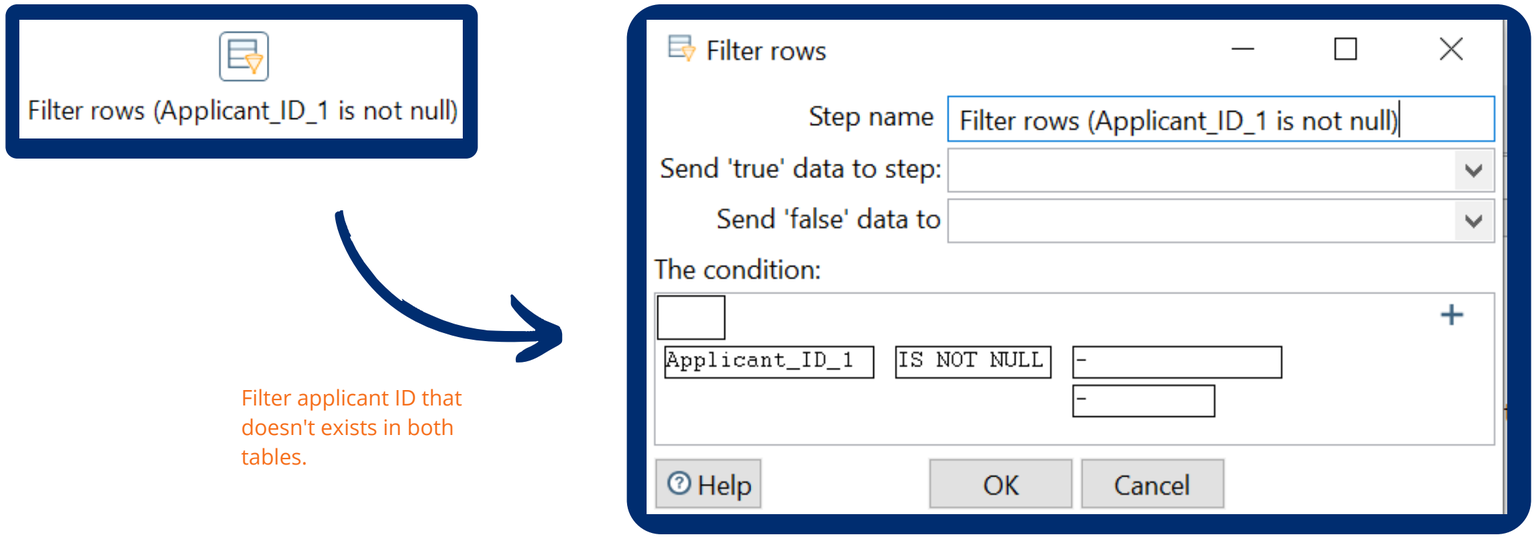


Importing Application dimension from OLAP.

Join both dimension tables based on applicant ID.

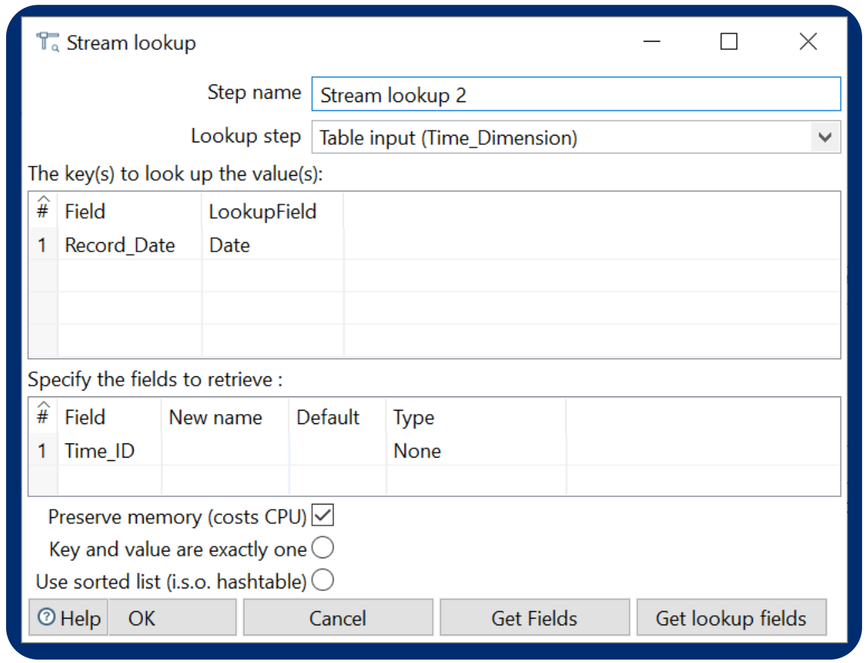


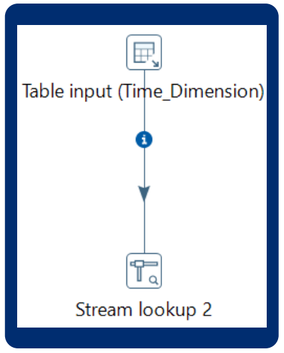
CreditCard_Fact (3)



Filter applicant ID that doesn't exists in both tables.

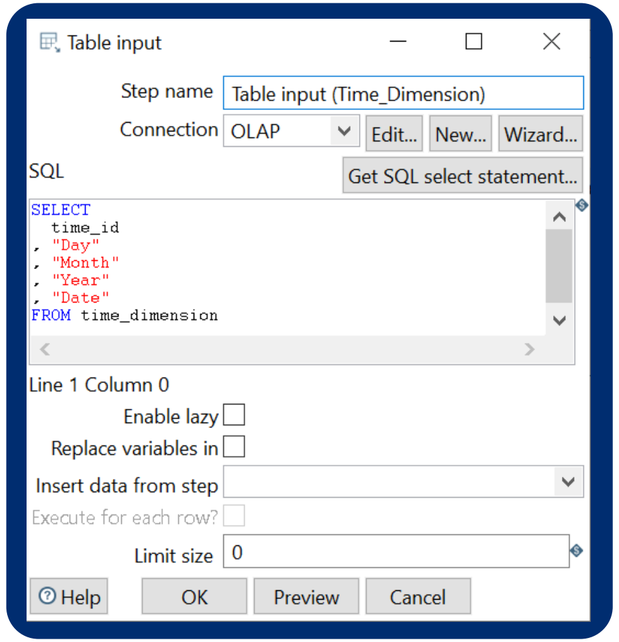
CreditCard_Fact (4)



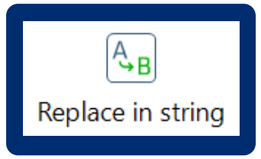


Importing Time dimension from OLAP.

Join application & credit record dimension with time dimension.

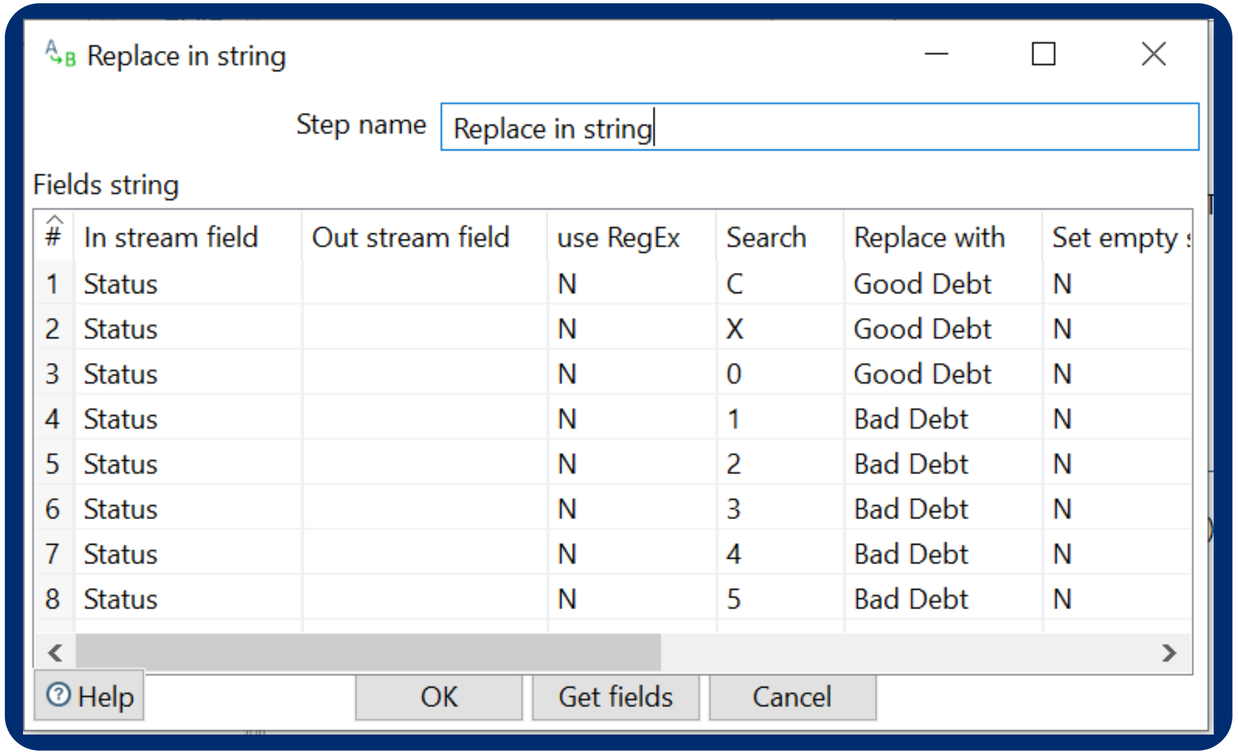


CreditCard_Fact (5)



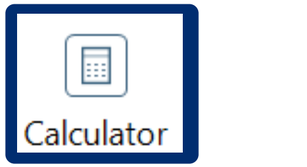
Replace C, X, 0 with 'Good Debt' (C: loan for that month is already paid; X: no loan for that month; 0: loan is 1 to 29 days overdue).

Replace 1, 2, 3, 4, 5 with 'Bad Debt' (1: loan is 30 to 59 days overdue; 2: loan is 60 to 89 days overdue; 3: loan is 90 to 119 days overdue; 4: loan is 120 to 149 days overdue; 5: loan is more than 150 days overdue).

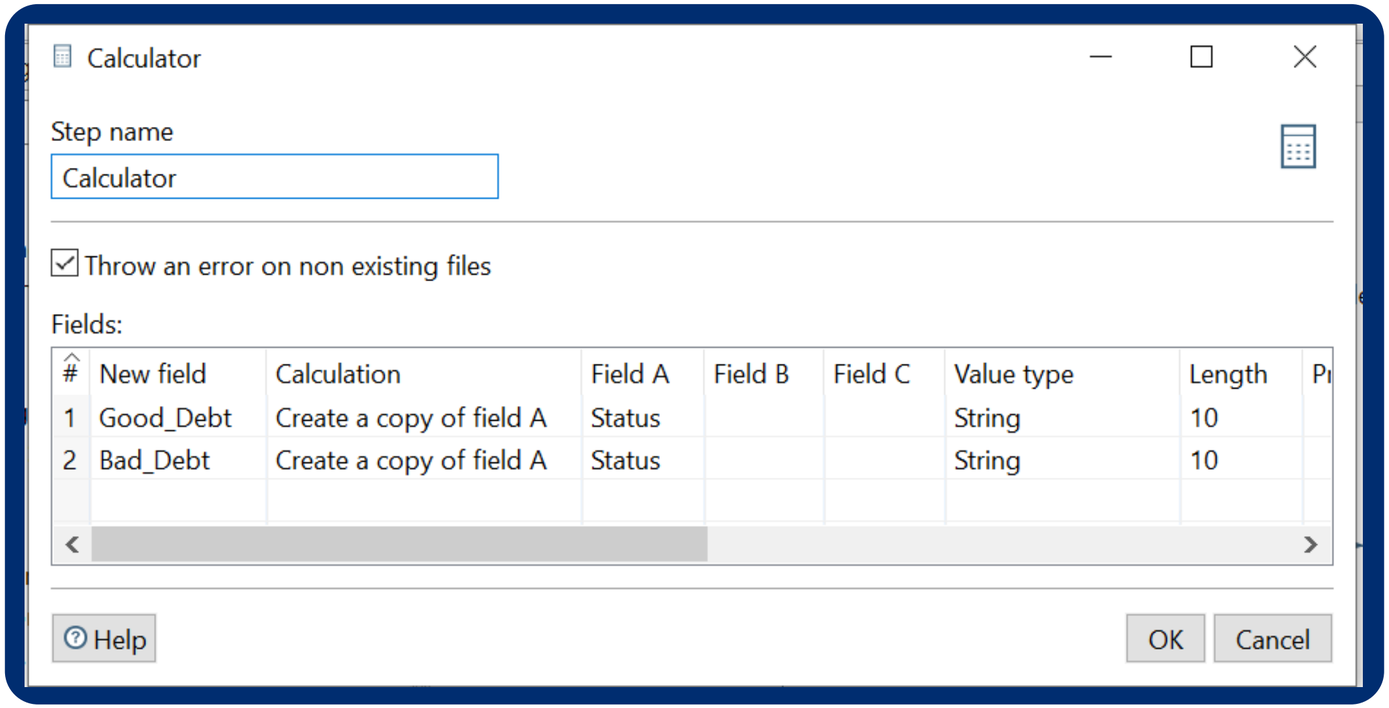


#	In stream field	Out stream field	use RegEx	Search	Replace with	Set empty s
1	Status		N	C	Good Debt	N
2	Status		N	X	Good Debt	N
3	Status		N	0	Good Debt	N
4	Status		N	1	Bad Debt	N
5	Status		N	2	Bad Debt	N
6	Status		N	3	Bad Debt	N
7	Status		N	4	Bad Debt	N
8	Status		N	5	Bad Debt	N

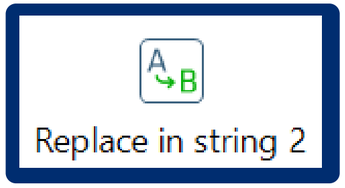
CreditCard_Fact (6)



Creating 2 copies from 'Status' column ('Good_Debt' and 'Bad_Debt').

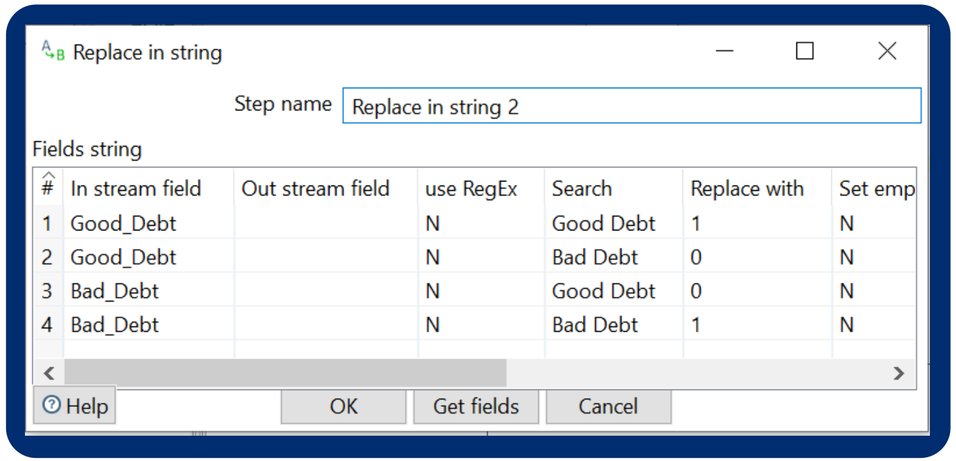


CreditCard_Fact (7)



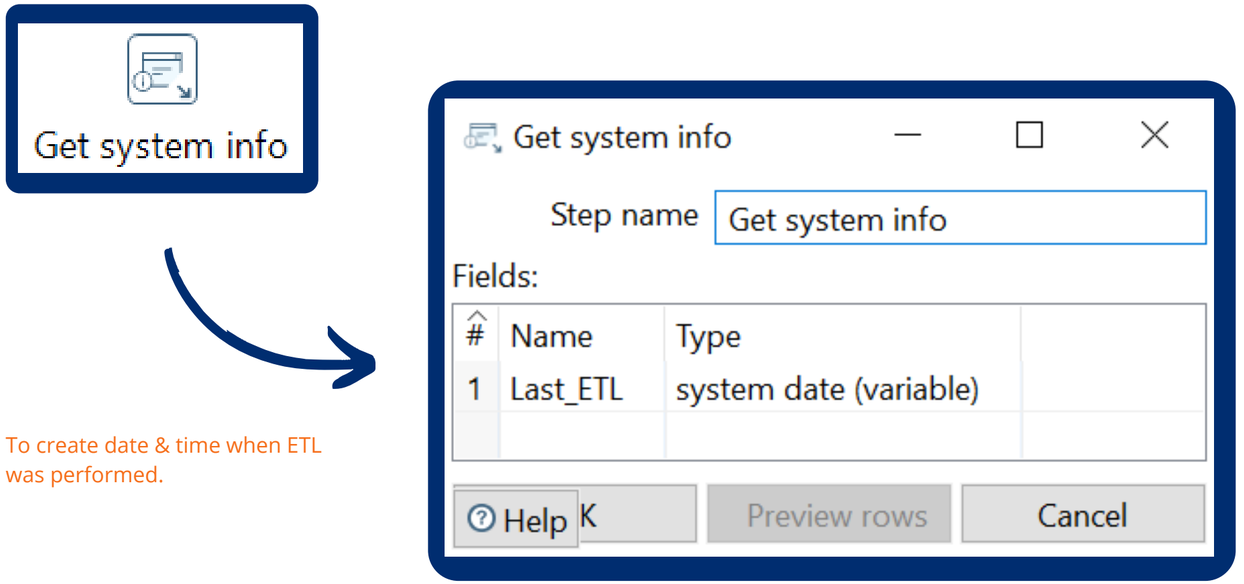
Good_Debt: Good Debt will be change to 1, while Bad Debt will be change to 0.

Bad_Debt: Good Debt will be change to 0, while Bad Debt will be change to 1.



#	In stream field	Out stream field	use RegEx	Search	Replace with	Set emp
1	Good_Debt		N	Good Debt	1	N
2	Good_Debt		N	Bad Debt	0	N
3	Bad_Debt		N	Good Debt	0	N
4	Bad_Debt		N	Bad Debt	1	N

CreditCard_Fact (8)

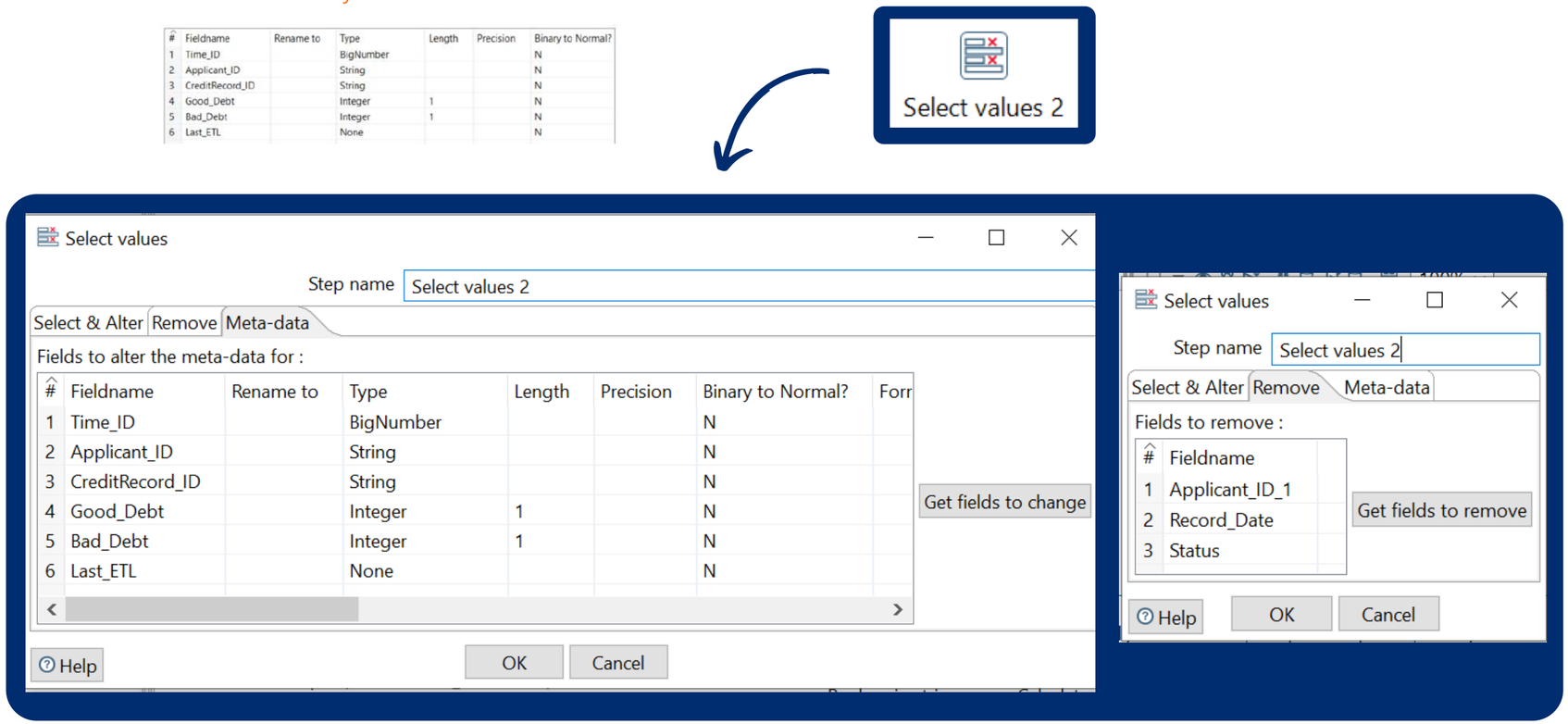


To create date & time when ETL was performed.

CreditCard_Fact (9)

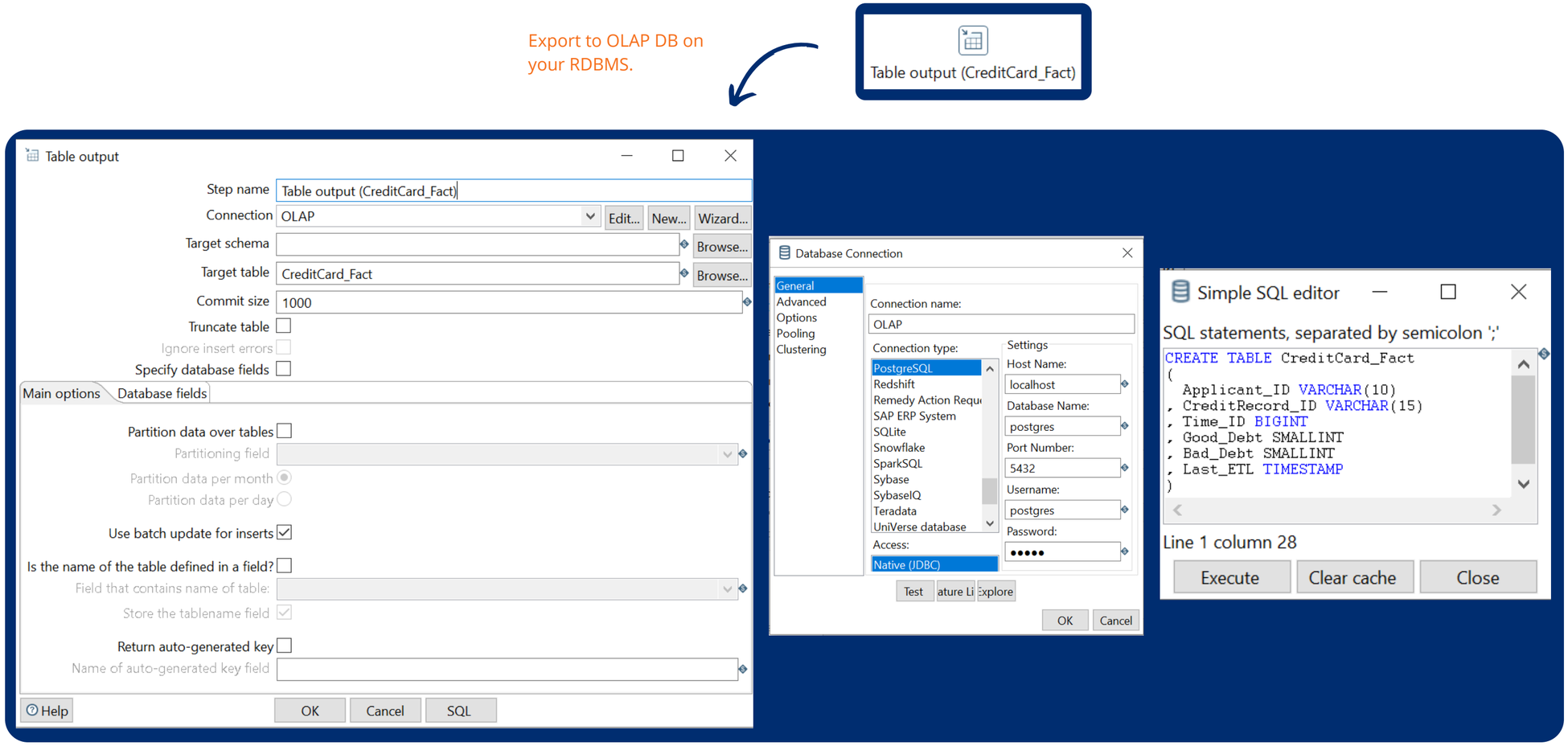
Select only selected Value.

#	Fieldname	Rename to	Type	Length	Precision	Binary to Normal?
1	Time_ID		BigNumber			N
2	Applicant_ID		String			N
3	CreditRecord_ID		String			N
4	Good_Debt		Integer	1		N
5	Bad_Debt		Integer	1		N
6	Last_ETL		None			N



CreditCard_Fact (10)

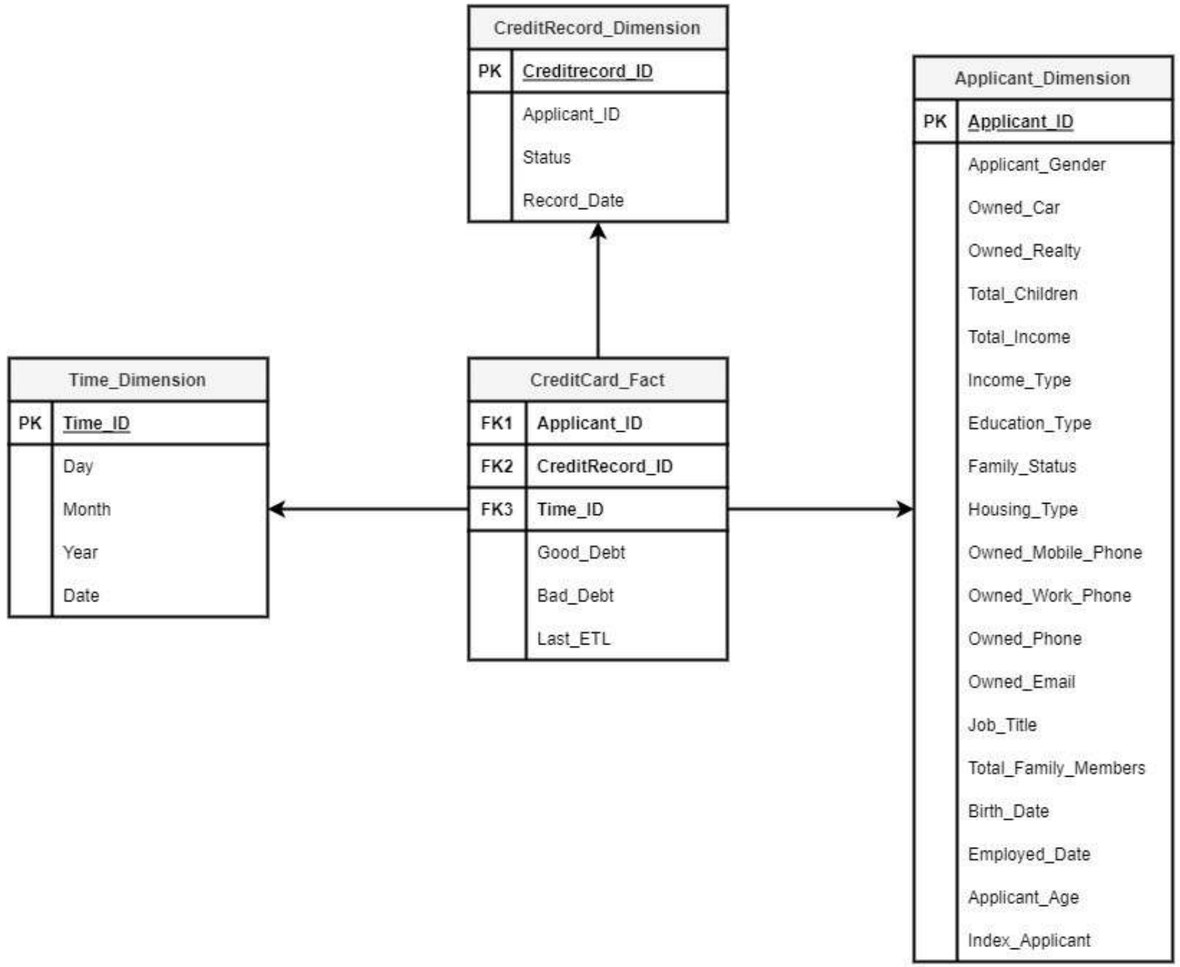
Export to OLAP DB on your RDBMS.



LARUTAN CAP BADAK GROUP

Star Schema

Star Schema


CreditRecord_Dimension
PK
Creditrecord_ID
Applicant_ID
Status
Record_Date
Applicant_Dimension
PK
Applicant_ID
Applicant_Gender
Owned_Car
Owned_Realty
Total_Children
Total_Income
Income_Type
Education_Type
Family_Status
Housing_Type
Owned_Mobile_Phone
Owned_Work_Phone
Owned_Phone
Owned_Email
Job_Title
Total_Family_Members
Birth_Date
Employed_Date
Applicant_Age
Index_Applicant
Time_Dimension
PK
Time_ID
Day
Month
Year
Date
CreditCard_Fact
FK1
Applicant_ID
FK2
CreditRecord_ID
FK3
Time_ID
Good_Debt
Bad_Debt
Last_ETL

LARUTAN CAP BADAK GROUP

OLAP Output

Result from OLAP
Output random testing

- **Credit Card Fact**
  - select * from creditcard_fact where applicant_id='5008824';

	applicant_id	creditrecord_id	time_id	good_debt	bad_debt	last_etl
1	5008824	93173	20,211,001	1	0	22-10-11 11:47:49.608
2	5008824	93174	20,210,901	1	0	22-10-11 11:47:49.608
3	5008824	93175	20,210,801	1	0	22-10-11 11:47:49.608
4	5008824	93176	20,210,701	1	0	22-10-11 11:47:49.608

  - select applicant_id, sum(good_debt) as good_debt, sum(bad_debt) as bad_debt, last_etl from creditcard_fact where applicant_id='5008824' group by applicant_id, last_etl;

	applicant_id	good_debt	bad_debt	last_etl
1	5008824	4	0	2022-10-11 11:47:49.608

- **Credit Record Information**
  - select * from credit_record where id='5008824';

	ID	MONTHS_BA	STATUS
	5008824	0	0
	5008824	-1	0
	5008824	-2	0
	5008824	-3	0

  - select * from creditrecord_dimension where applicant_id='5008824';

	applicant_id	status	record_date	creditrecord_id
1	5008824	0	21-10-01 00:00:00.000	93173
2	5008824	0	21-09-01 00:00:00.000	93174
3	5008824	0	21-08-01 00:00:00.000	93175
4	5008824	0	21-07-01 00:00:00.000	93176

Result from OLAP Output random testing

- **Applicant General Information**
  - select * from applicant_record where id='5008824';

ID	CODE_GEND	FLAG_OWN_	FLAG_OWN_	CNT_CHILDR	AMT_INCOM	NAME_INCO	NAME_EDUC	NAME_FAMI	NAME_HOUS	DAYS_BIRTH
5008824	M	Y	Y	0	135000	Commercial as:	Secondary / se	Married	House / apartn	-17778

DAYS_EMPL	FLAG_MOBIL	FLAG_WORK	FLAG_PHON	FLAG_EMAIL	OCCUPATIOI	CNT_FAM_M
-1194	1	0	0	0	Laborers	2

  - select * from applicant_dimension where applicant_id='5008824';

	applicant_id	applicant_gender	owned_car	owned_realty	total_children	total_income	income_type	education_type
1	5008824	Male	Have	Have	0	135,000	Commercial associate	Secondary / secondary special

family_status	housing_type	owned_mobile_phone	owned_work_phon	owned_phone	owned_emai	job_title	total_family_member
Married	House / apartment	Have	Don't Have	Don't Have	Don't Have	Laborers	2

birth_date	employed_date	applicant_age	index_applicant
1973-01-28 00:00:00.000	2018-06-25 00:00:00.000	48	12

Result from OLAP Output random testing

- select applicant_age, birth_date, applicant_gender, family_status
  from applicant_dimension where applicant_id='5008824';

	applicant_age	birth_date	applicant_gender	family_status
1	48	1973-01-28 00:00:00.000	Male	Married

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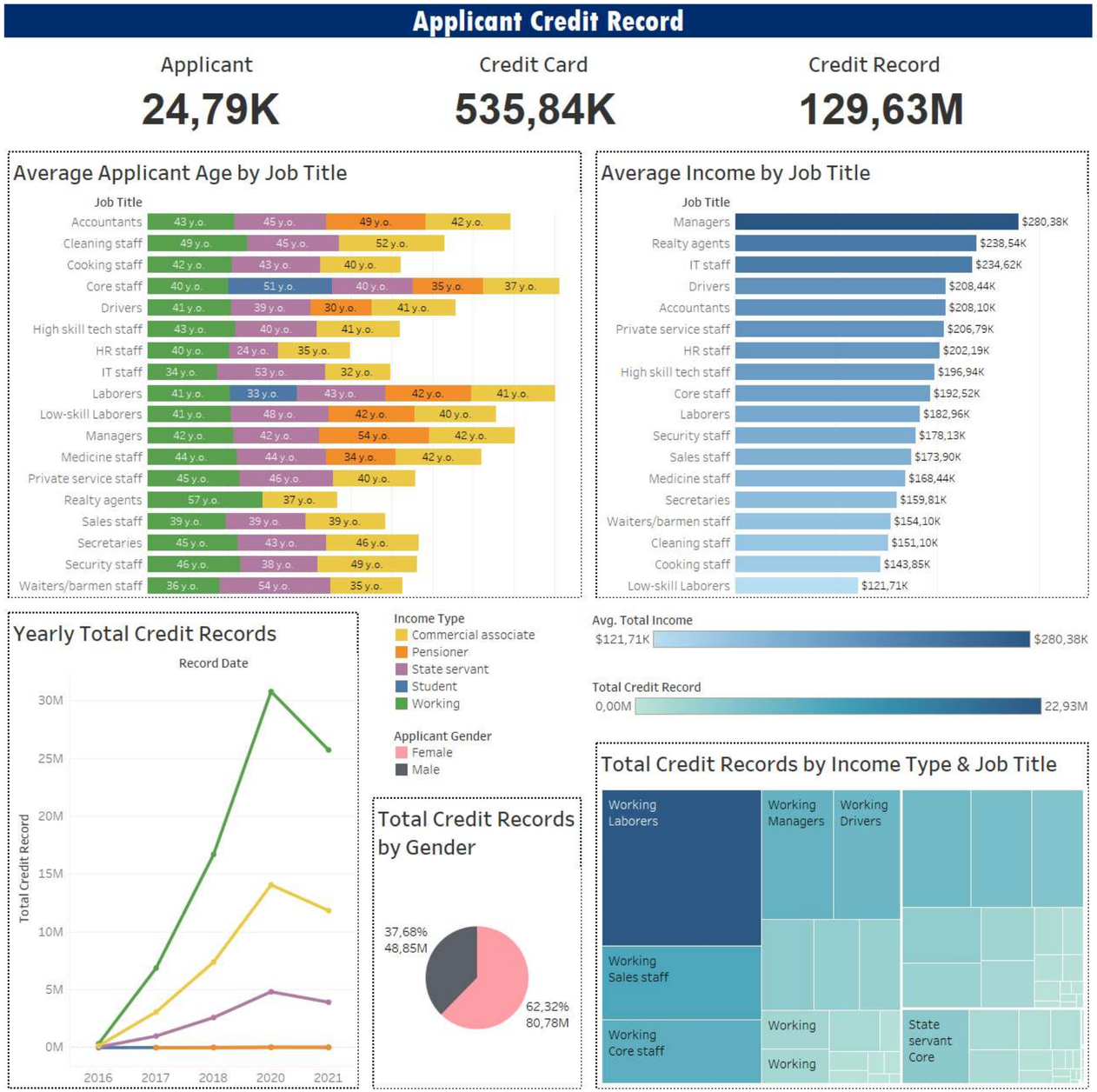
Insights

Insights


Applicant Credit Record
Applicant
24,79K
Credit Card
535,84K
Credit Record
129,63M
Average Applicant Age by Job Title
Job Title
Accountants 43 y.o. 45 y.o. 49 y.o. 42 y.o.
Cleaning staff 49 y.o. 45 y.o. 52 y.o.
Cooking staff 42 y.o. 43 y.o. 40 y.o.
Core staff 40 y.o. 51 y.o. 40 y.o. 35 y.o. 37 y.o.
Drivers 41 y.o. 39 y.o. 30 y.o. 41 y.o.
High skill tech staff 43 y.o. 40 y.o. 41 y.o.
HR staff 40 y.o. 24 y.o. 35 y.o.
IT staff 34 y.o. 53 y.o. 32 y.o.
Laborers 41 y.o. 33 y.o. 43 y.o. 42 y.o. 41 y.o.
Low-skill Laborers 41 y.o. 48 y.o. 42 y.o. 40 y.o.
Managers 42 y.o. 42 y.o. 54 y.o. 42 y.o.
Medicine staff 44 y.o. 44 y.o. 34 y.o. 42 y.o.
Private service staff 45 y.o. 46 y.o. 40 y.o.
Realty agents 57 y.o. 37 y.o.
Sales staff 39 y.o. 39 y.o. 39 y.o.
Secretaries 45 y.o. 43 y.o. 46 y.o.
Security staff 46 y.o. 38 y.o. 49 y.o.
Waiters/barmen staff 36 y.o. 54 y.o. 35 y.o.
Average Income by Job Title
Job Title
Managers $280,38K
Realty agents $238,54K
IT staff $234,62K
Drivers $208,44K
Accountants $208,10K
Private service staff $206,79K
HR staff $202,19K
High skill tech staff $196,94K
Core staff $192,52K
Laborers $182,96K
Security staff $178,13K
Sales staff $173,90K
Medicine staff $168,44K
Secretaries $159,81K
Waiters/barmen staff $154,10K
Cleaning staff $151,10K
Cooking staff $143,85K
Low-skill Laborers $121,71K
Yearly Total Credit Records
Record Date
Total Credit Record
30M
25M
20M
15M
10M
5M
0M
2016
2017
2018
2020
2021
Income Type
Commercial associate
Pensioner
State servant
Student
Working
Applicant Gender
Female
Male
Avg. Total Income
$121,71K
$280,38K
Total Credit Record
0,00M
22,93M
Total Credit Records by Gender
37,68%
48,85M
62,32%
80,78M
Total Credit Records by Income Type & Job Title
Working Laborers
Working Managers
Working Drivers
Working Sales staff
Working Core staff
Working
Working
State servant Core

Point of Insights

01

Average Applicant Age by Job Title

Each job title is carried out by applicants of various ages. One of them is Accountants who are carried out applicants with an average age of 43 y.o. in the Working income type, 45 y.o. in the State servant income type, 49 y.o. in the Pensioner income type, and 42 y.o. in the Commercial associate income type.

02

Average Income by Job Title

The largest average income by job title is Managers with an average total income of $280,38K.

03

Yearly Total Credit Records

Based on yearly total credit records, Working income is the highest total credit, but in 2020 the total credit record has decreased significantly.

04

Total Credit Records by Gender

Females do more credit than males, with a total female credit record of 48,85M.

05

Total Credit Records by Income Type and Job Title

The top 5 types of income with job titles from the applicants are as follows:

1) Working, Laborers
2) Working, Sales staff
3) Working, Core staff
4) Working, Managers
5) Working, Drivers

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Thank You