

SCD Informatica

SCD 1:

Source file:

[illegible]

Building the connection to Source file in informatica:

 SRC_EMP

 The test for this connection was successful.

Connection Details

Connection Name: SRC_EMP
Description:
Type: Flat File (Informatica)
Created On: Sep 21, 2023 2:07:59 AM
Updated On: Sep 21, 2023 8:09:55 AM
Created By: varino@outlook.com
Updated By: varino@outlook.com

Flat File (Informatica) Connection Properties





Runtime Environment: DESKTOP-65JNNSN
Directory: C:\Users\varino\Desktop\Informatica
Date Format: MM/dd/yyyy HH:mm:ss
Code Page: UTF-8

Destination DB:

SELECT * FROM DIM_EMP;

Script Output x


Query Result x



SQL | All Rows Fetched: 0 in 0.004 seconds

EMPLOYEE...	EMPLOYEE...	NAME	SALARY	DEPARTM...	CHECKSUM
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Building connection with destination on informatica:

 SRC_DIM_EMP

type:

Oracle (Informatica)

Created On:

Sep 21, 2023 3:07:05 AM

Updated On:

Sep 21, 2023 9:17:34 AM

Created By:

varino@outlook.com

Updated By:

varino@outlook.com

Oracle (Informatica) Connection Properties

?

Runtime Environment:

DESKTOP-65JNNSN

Oracle Subtype:

Oracle On-premise

Authentication Mode:

Oracle Database Authentication

User Name:

varino

Password:

Host:

localhost

Port:

1521

Service Name:

XE

Schema:

Code Page:

UTF-8

Encryption Method:

No Encryption

Crypto Protocol Version:

TLSv1

Validate Server Certificate:

True

Trust Store:

Creating SCD_1_mapping and adding it to a Mapping task:

 RUN_SCD_1

Edit

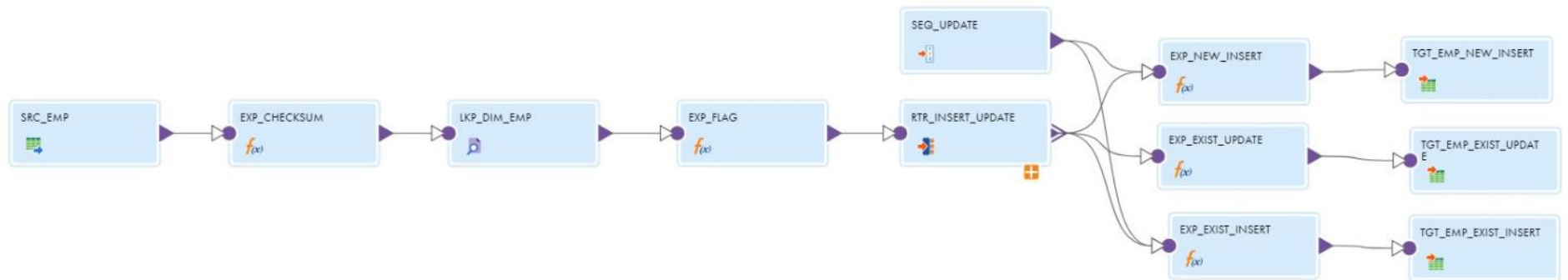
Run

Name: SCD_1
Location: Default
Updated Date: Sep 25, 2023 5:10:24 AM

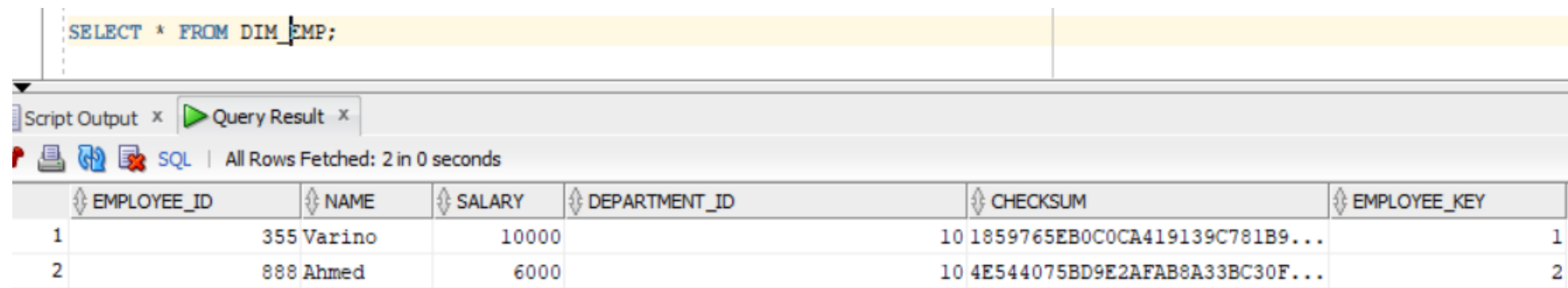
Pushdown Optimization

Pushdown Optimization type: None
Optimization context type: None
Pushdown Optimization Fallback Option: Partial PDO
Create Temporary View: NO
Create Temporary Sequence: NO

Mapping Image



First Run of SCD_1:



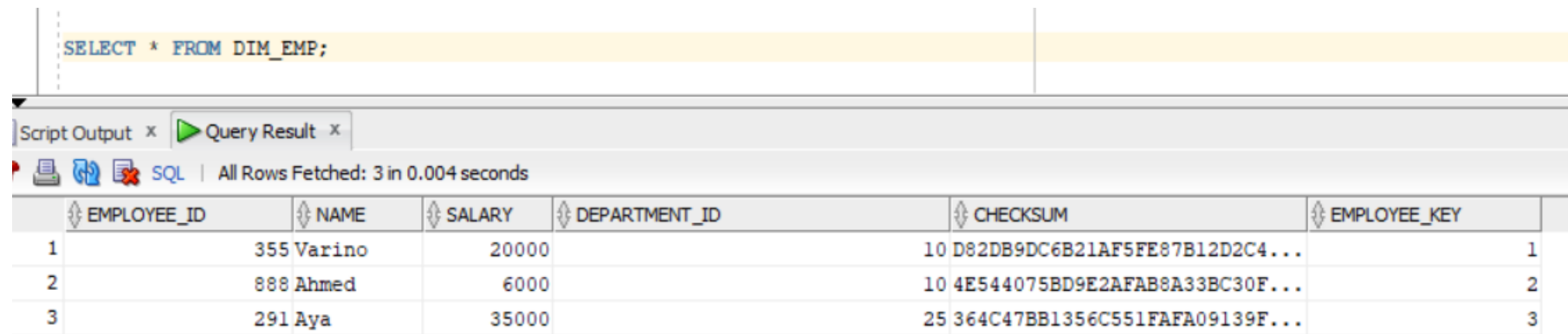
```
SELECT * FROM DIM_EMP;
```

EMPLOYEE_ID	NAME	SALARY	DEPARTMENT_ID	CHECKSUM	EMPLOYEE_KEY
1	355 Varino	10000		10 1859765EB0C0CA419139C781B9...	1
2	888 Ahmed	6000		10 4E544075BD9E2AFAB8A33BC30F...	2

Changing the salary for Varino and adding new employee to the source:

A	B	C	D
EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
355	Varino	20000	10
888	Ahmed	6000	10
291	Aya	35000	25

And by running SCD_1 task again it worked successfully:



```
SELECT * FROM DIM_EMP;
```

EMPLOYEE_ID	NAME	SALARY	DEPARTMENT_ID	CHECKSUM	EMPLOYEE_KEY
1	355 Varino	20000		10 D82DB9DC6B21AF5FE87B12D2C4...	1
2	888 Ahmed	6000		10 4E544075BD9E2AFAB8A33BC30F...	2
3	291 Aya	35000		25 364C47BB1356C551FAFA09139F...	3

SCD_2:



Source file:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	355	Varino	3500	10
3	888	Ahmed	10000	15
4				
5				
6				

Target DB:

Script Output x

Query Result x



SQL


All Rows Fetched: 0 in 0.003 seconds

EMPLOYEE...	NAME	SALARY	DEPARTMENT_ID	START_DATE	END_DATE	SEQ_NUM	CHECKSUM	EMPLOYEE_KEY
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	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	355	Varino	3500	10
3	888	Ahmed	6000	15
4				

The old value -> end_date is set to the previous day and inserting the new value with a null end_date:

Script Output x Query Result x

 All Rows Fetched: 3 in 0.002 seconds

	EMPLOYEE...	NAME	SALARY	DEPARTMENT_ID	START_DATE	END_DATE	SEQ_NUM	CHECKSUM	EMPLOYEE_KEY
1	355	Varino	3500	10	06-OCT-23	(null)	1	83FD321...	1
2	888	Ahmed	10000	15	06-OCT-23	05-OCT-23	1	AC1E36B...	2
3	888	Ahmed	6000	15	06-OCT-23	(null)	2	5A7FC71...	3

Inserting new employee Aya and running the mapping task again:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	355	Varino	3500	10
3	888	Ahmed	6000	15
4	260	Aya	9500	10
5				

And this is the target db now:

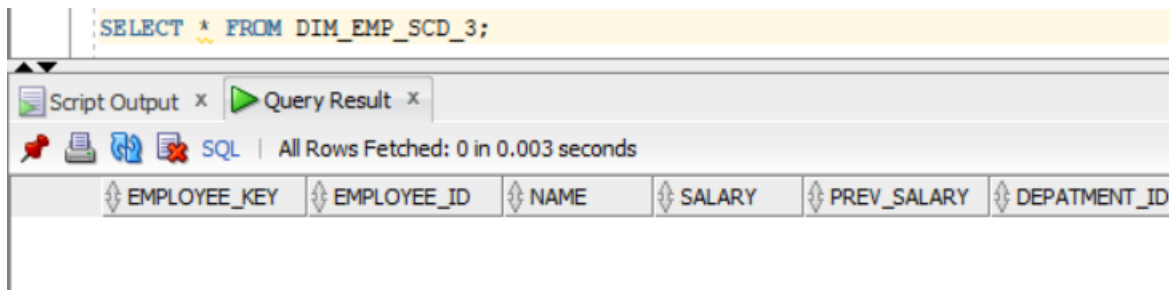
	EMPLOYEE...	NAME	SALARY	DEPARTMENT_ID	START_DATE	END_DATE	SEQ_NUM	CHECKSUM	EMPLOYEE_KEY
1	355	Varino	3500	10	06-OCT-23	(null)	1	83FD321...	1
2	888	Ahmed	10000	15	06-OCT-23	05-OCT-23	1	AC1E36B...	2
3	888	Ahmed	6000	15	06-OCT-23	(null)	2	5A7FC71...	3
4	260	Aya	9500	10	06-OCT-23	(null)	1	30C9449...	4

SCD_3:

Source file:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	800	Varino	25000	10
3	625	Ahmed	8000	15
4				
5				

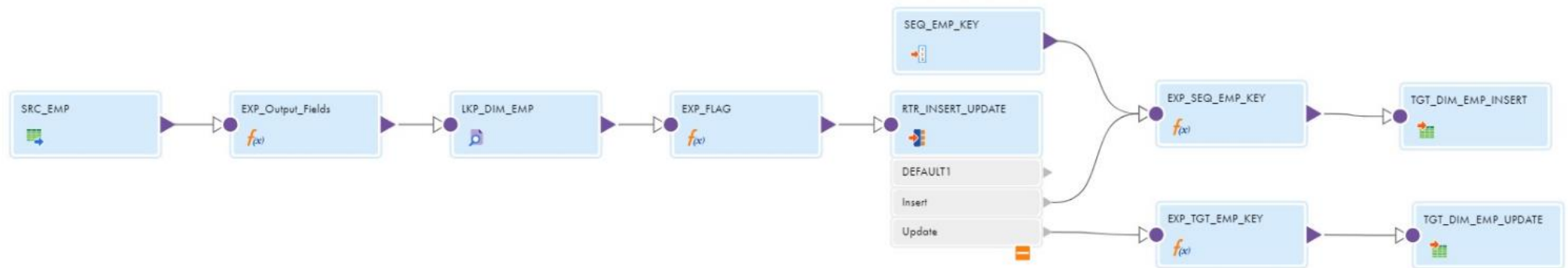
TGT DB:



The screenshot shows a database query tool interface. At the top, a yellow bar contains the SQL query: `SELECT * FROM DIM_EMP_SCD_3;`. Below this, there are tabs for 'Script Output' and 'Query Result'. The 'Query Result' tab is active, displaying a table with the following columns: `EMPLOYEE_KEY`, `EMPLOYEE_ID`, `NAME`, `SALARY`, `PREV_SALARY`, and `DEPATMENT_ID`. The table is currently empty, and the status bar indicates 'All Rows Fetched: 0 in 0.003 seconds'.

EMPLOYEE_KEY	EMPLOYEE_ID	NAME	SALARY	PREV_SALARY	DEPATMENT_ID
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Mapping SCD_3 and adding it to the mapping task:



First Run:

SQL | All Rows Fetched: 2 in 0.002 seconds

	EMPLOYEE_KEY	EMPLOYEE_ID	NAME	SALARY	PREV_SALARY	DEPATMENT_ID
1	1	800	Varino	25000	(null)	10
2	2	625	Ahmed	8000	(null)	15

Changing the salary for Varino to 6000 and run the mapping task again:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	800	Varino	6000	10
3	625	Ahmed	8000	15
4				
5				

Second Run:

SQL | All Rows Fetched: 2 in 0.002 seconds

	EMPLOYEE_KEY	EMPLOYEE_ID	NAME	SALARY	PREV_SALARY	DEPATMENT_ID
1	1	800	Varino	6000	25000	10
2	2	625	Ahmed	8000	(null)	15

Adding new emp Aya and running it again:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	800	Varino	6000	10
3	625	Ahmed	8000	15
4	501	Aya	15000	10
5				

Third Run:

SELECT * FROM DIM_EMP_SCD_3;

Script Output x Query Result x

SQL | All Rows Fetched: 3 in 0.003 seconds

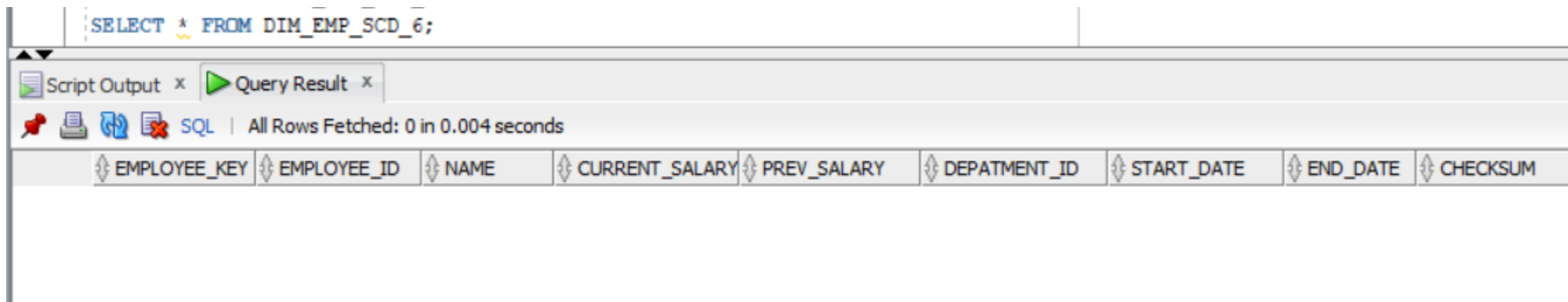
	EMPLOYEE_KEY	EMPLOYEE_ID	NAME	SALARY	PREV_SALARY	DEPATMENT_ID
1	1	800	Varino	6000	25000	10
2	2	625	Ahmed	8000	(null)	15
3	3	501	Aya	15000	(null)	10

SCD_6:

Source file:

	A	B	C	D
1	EMP_ID	EMP_NAME	EMP_SAL	DEPT_ID
2	305	Varino	5000	100
3	251	Kareem	8000	102
4				
5				

TGT DB:



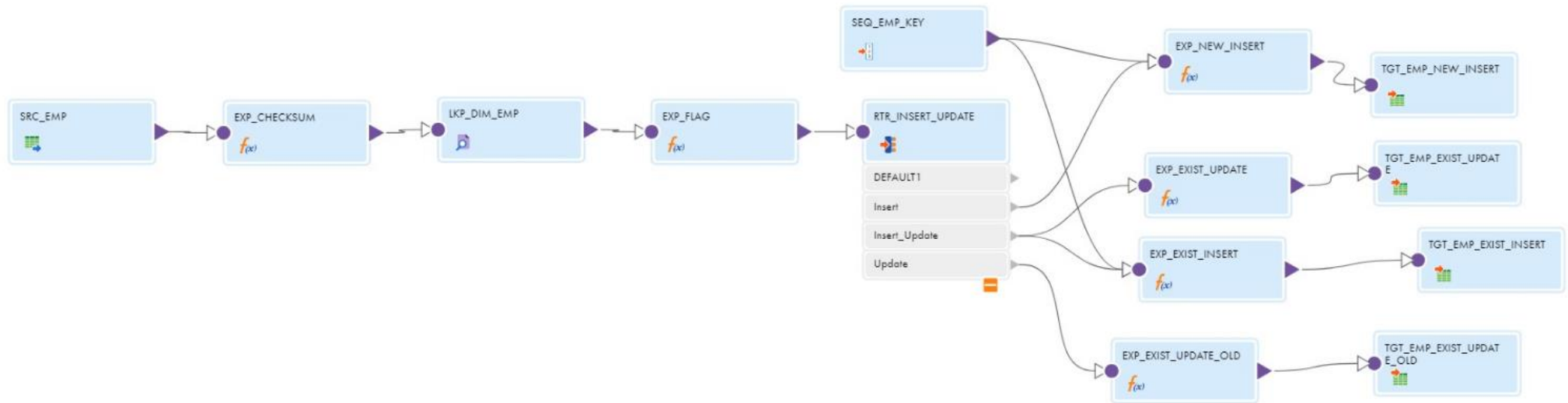
SELECT * FROM DIM_EMP_SCD_6;

Script Output x Query Result x

SQL | All Rows Fetched: 0 in 0.004 seconds

EMPLOYEE_KEY	EMPLOYEE_ID	NAME	CURRENT_SALARY	PREV_SALARY	DEPARTMENT_ID	START_DATE	END_DATE	CHECKSUM
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SCD_6_Mapping and adding it to a mapping task:



Setting the start_date parameter:

Edit RUN_SCD_6

1 Definition
2 Input Parameters
3 Sequences
4 Schedule

Parameter_start_date
Parameter Details*
New...

Expression

TO_DATE('09/22/2023 00:00:00')

Delete

First Run:

	EMPLOYEE_KEY	EMPLOYEE_ID	NAME	CURRENT_SALARY	PREV_SALARY	DEPATMENT_ID	START_DATE	END_DATE	CHECKSUM
1	1	305	Varino	5000	5000	100	22-SEP-23	31-DEC-99	6F05DB95F3...
2	2	251	Kareem	8000	8000	102	22-SEP-23	31-DEC-99	2D3ABA39B8...

Changing the salary for varino to 12500 and run the mapping task again:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	305	Varino	12500	100
3	251	Kareem	8000	102
4				
5				

Second Run:

	EMPLOYEE_KEY	EMPLOYEE_ID	NAME	CURRENT_SALARY	PREV_SALARY	DEPATMENT_ID	START_DATE	END_DATE	CHECKSUM
1	1	305	Varino	12500	5000	100	22-SEP-23	22-SEP-23	6F05DB95F3...
2	2	251	Kareem	8000	8000	102	22-SEP-23	31-DEC-99	2D3ABA39B8...
3	3	305	Varino	12500	12500	100	22-SEP-23	31-DEC-99	C65F81825A...

Adding new emp Aya:

	A	B	C	D
1	EMP_ID	EMP_NAM	EMP_SALA	DEPT_ID
2	305	Varino	12500	100
3	251	Kareem	8000	102
4	150	Aya	6000	105
5				

Third Run:

EMPLOYEE_KEY	EMPLOYEE_ID	NAME	CURRENT_SALARY	PREV_SALARY	DEPATMENT_ID	START_DATE	END_DATE	CHECKSUM
1	1	305 Varino	12500	5000	100	22-SEP-23	22-SEP-23	6F05DB95F3...
2	2	251 Kareem	8000	8000	102	22-SEP-23	31-DEC-99	2D3ABA39B8...
3	3	305 Varino	12500	12500	100	22-SEP-23	31-DEC-99	C65F81825A...
4	4	150 Aya	6000	6000	105	22-SEP-23	31-DEC-99	F5A9CA000C...