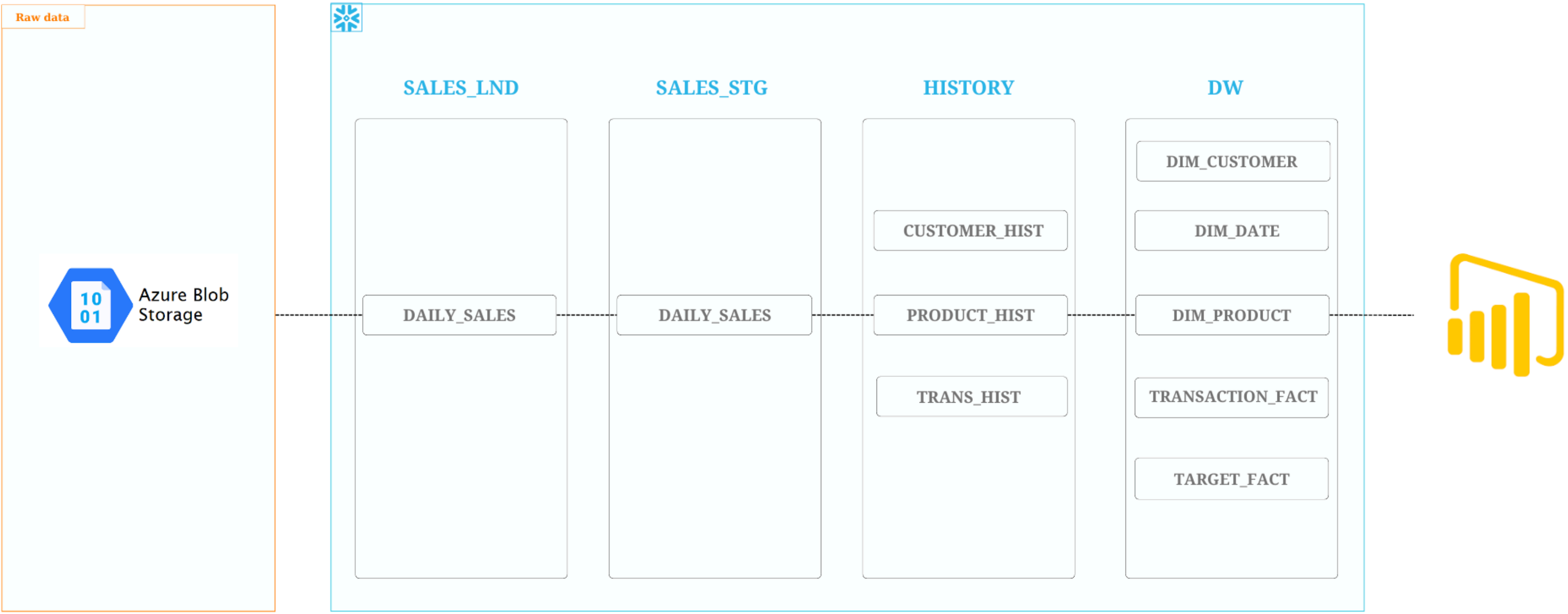
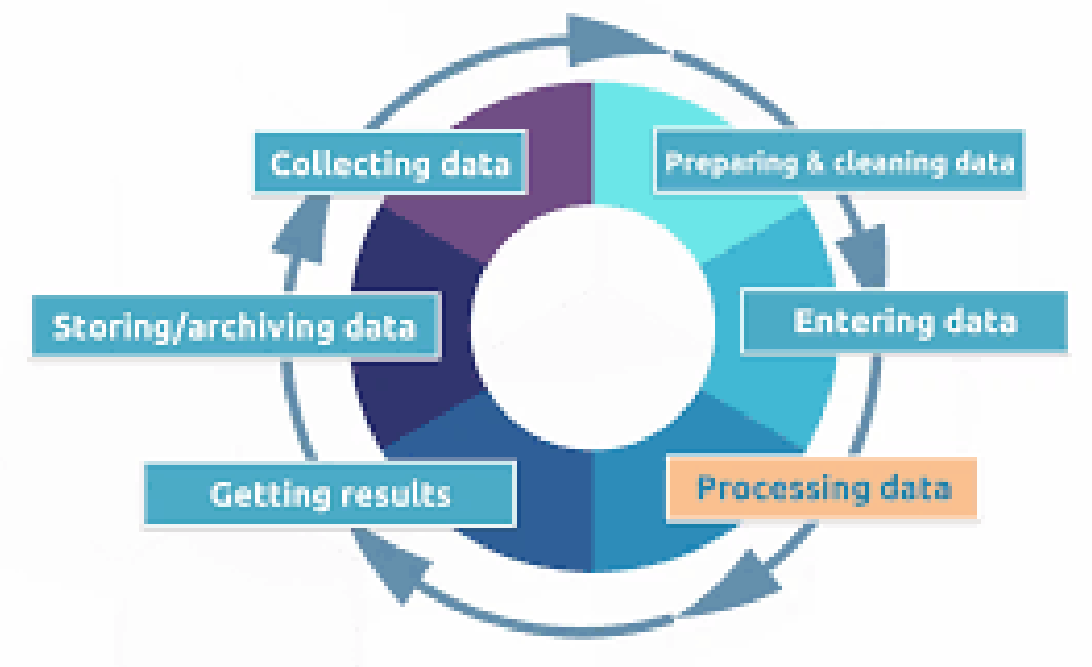


Architecture





Processing data



Input data




[Upload](#)
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[Rename](#)
[Delete](#)
[Change tier](#)
[Acquire lease](#)
[Break lease](#)
[Give feedback](#)

Authentication method: Access key ([Switch to Microsoft Entra user account](#))

Location: snowflakecsv

Search blobs by prefix (case-sensitive)

☒ Show deleted objects

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state	
<input type="checkbox"/>  dailysales_02102021.csv	12/9/2024, 4:37:22 PM	Hot (Inferred)		Block blob	10.79 KiB	Available	...
<input type="checkbox"/>  dailysales_03102021.csv	12/12/2024, 4:45:42 ...	Hot (Inferred)		Block blob	3.52 KiB	Available	...
<input type="checkbox"/>  dailysales_04102021.csv	12/14/2024, 4:05:12 ...	Hot (Inferred)		Block blob	4.13 KiB	Available	...

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	,Customer	_Code	,customer_name	,customer_type_name	,area_name	,region_name	,Invoice_Number	,Invoice_Date	,ZP_Item_Code	,Price	,Quantity			
2	0	,30190521	,CN Quay CPDP Ben Tai-	NT So 02	Hello,Beauty	,Ho Chi Minh	,HCMC	,1225690651	,2021-10-02	,21085258	,204286	,1		
3	1	,30191419	,Cong Ty TMDP Huynh Kim	Hello,Wholesaler	,Ho Chi Minh	,HCMC	,1225691640	,2021-10-02	,21193950	,179600	,3			
4	2	,30191419	,Cong Ty TMDP Huynh Kim	Hello,Wholesaler	,Ho Chi Minh	,HCMC	,1225691630	,2021-10-02	,21193950	,179600	,31			
5	3	,30173102	,Cong Ty Co Phan NThuong	Da KThanh Thanhnn	My Da Lat	Hello,Beauty	Dep,Lam Dong	,North	,1212577120	,2021-10-02	,21193955	,547627	,5	
6	4	,30173737	,Cong Ty Co Phan TMDV	Thang Long	Hello,Beauty	Dep,Khanh Hoa	,North	,1212576969	,2021-10-02	,21193949	,204286	,10		
7	5	,30191729	,Cong Ty CPDP Gia Dinh-	NT So 21	Hello,Beauty	,Ho Chi Minh	,HCMC	,1225690758	,2021-10-02	,21085258	,204286	,100		
8	6	,30191729	,Cong Ty CPDP Gia Dinh-	NT So 21	Hello,Beauty	,Ho Chi Minh	,HCMC	,1225690661	,2021-10-02	,21193946	,203743	,2		
9	7	,30189144	,Chau Thanhng Sinh	Hello,Beauty	,Nghe An	,Mekong	,1225691005	,2021-10-02	,21193949	,204286	,10			
10	8	,30185015	,Dai Ly Ban Cho Quay	CPDP TV.Faom (To)	Hello,Beauty	,Thai Nguyen	,Mekong	,1225691687	,2021-10-02	,21193966	,169886	,2		

Ingest data

```
CREATE OR REPLACE PROCEDURE DEMO_DB.SALES_LND.SP_LOAD_RAW_TO_LND()  
RETURNS TABLE()  
LANGUAGE SQL  
EXECUTE AS OWNER  
AS  
DECLARE  
    res RESULTSET;  
    select_statement VARCHAR;  
BEGIN  
    create or replace stream DEMO_DB.SALES_LND.stream_lnd on table DEMO_DB.SALES_LND.DAILY_SALES APPEND_ONLY=TRUE;  
  
    COPY INTO DAILY_SALES  
    FROM @stage_azure  
    FILE_FORMAT = (format_name = azure_fileformat)  
    PATTERN = '.*dailysales.*';  
    --RETURN 'Successful load';  
    select_statement:= 'select * from table(result_scan(last_query_id()))';  
    res := (EXECUTE IMMEDIATE :select_statement);  
    RETURN TABLE(res);  
END;
```

LOAD TO STAGING

```
INSERT INTO DEMO_DB.SALES_STG.DAILY_SALES
SELECT TRIM(s.id) as id,
       TRIM(s.customer_code) as customer_code,
       TRIM(s.customer_name) as customer_name,
       PARSE_JSON(s.customer_info):name::STRING as contact_person,
       PARSE_JSON(s.customer_info):email::STRING as contact_email,
       TRIM(s.customer_type_name) as customer_type_name,
       TRIM(s.area_name) as area_name,
       TRIM(s.region_name) as region_name,
       TRIM(s.invoice_number) as invoice_code,
       TRIM(s.item_code) as item_code,
       TRIM(s.item_name) as item_name,
       s.price,
       s.quantity,
       TO_DATE(s.invoice_date, 'YYYY-MM-DD') as invoice_date,
       CURRENT_TIMESTAMP() as created_at
FROM DEMO_DB.SALES_LND.stream_lnd as s
WHERE METADATA$ACTION = 'INSERT';
```

SCD TYPE 2



Records in initial load

30172683	NT Thanhng Hello	gregorybooth@example.org	2024-12-12 01:43:26.383	null	1000-01-01	9999-12-31	Y

Capture the changes with SCD 2

	CUSTOMER_CODE	CUSTOMER_NAME	CONTACT_EMAIL	INSERT_AT	UPDATE_AT	START_DATE	END_DATE	CURRENT_FLAG
1	30172406	KThanh NThuong Tinh Khanh Thanh Hello	kinganna@example.org	2024-12-12 01:43:26.383	2024-12-14 01:05:30.511	1000-01-01	2024-12-13	N
2	30172406	KThanh NThuong Tinh Khanh Thanh	cory81@example.org	2024-12-14 01:05:30.511	null	2024-12-14	9999-12-31	Y
3	30174268	Quay Doanh Nghiep Becamex So 131 Hello	sosborne@example.net	2024-12-12 01:43:26.383	2024-12-12 01:46:28.120	1000-01-01	2024-12-11	N
4	30174268	Quay Doanh Nghiep Becamex So 132	sydney smith@example.com	2024-12-12 01:46:28.120	2024-12-14 01:05:30.511	2024-12-12	2024-12-13	N
5	30174268	Quay Doanh Nghiep Becamex So 131 Hello	svdneysmith@example.com	2024-12-14 01:05:30.511	null	2024-12-14	9999-12-31	Y

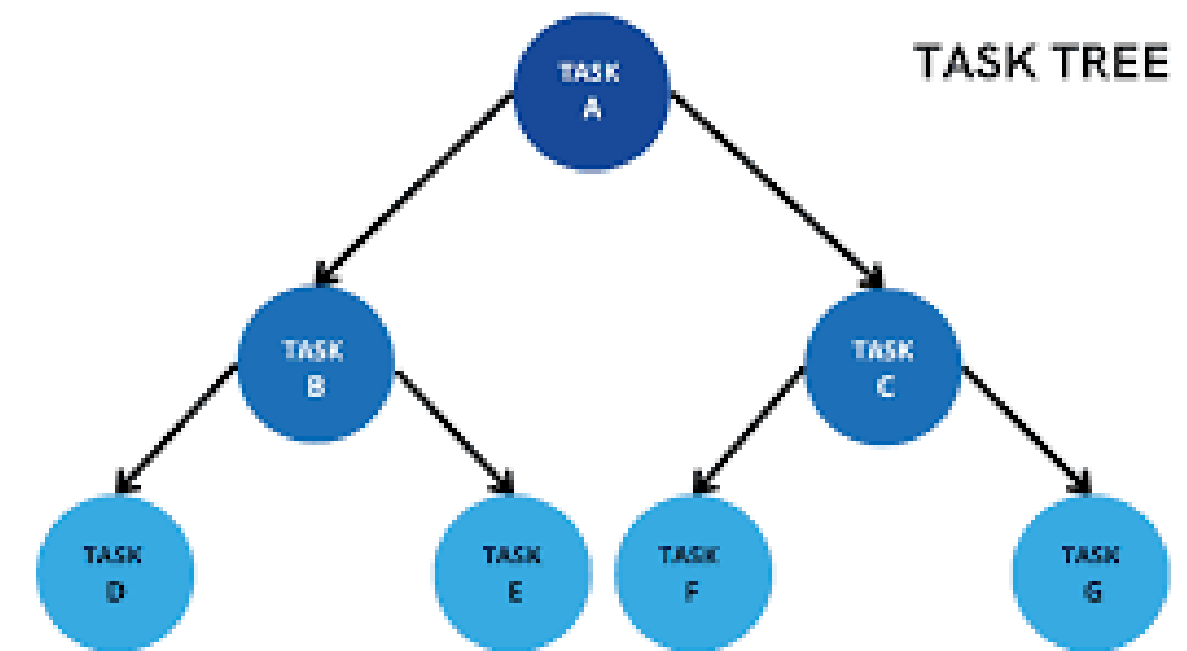
create checksum values

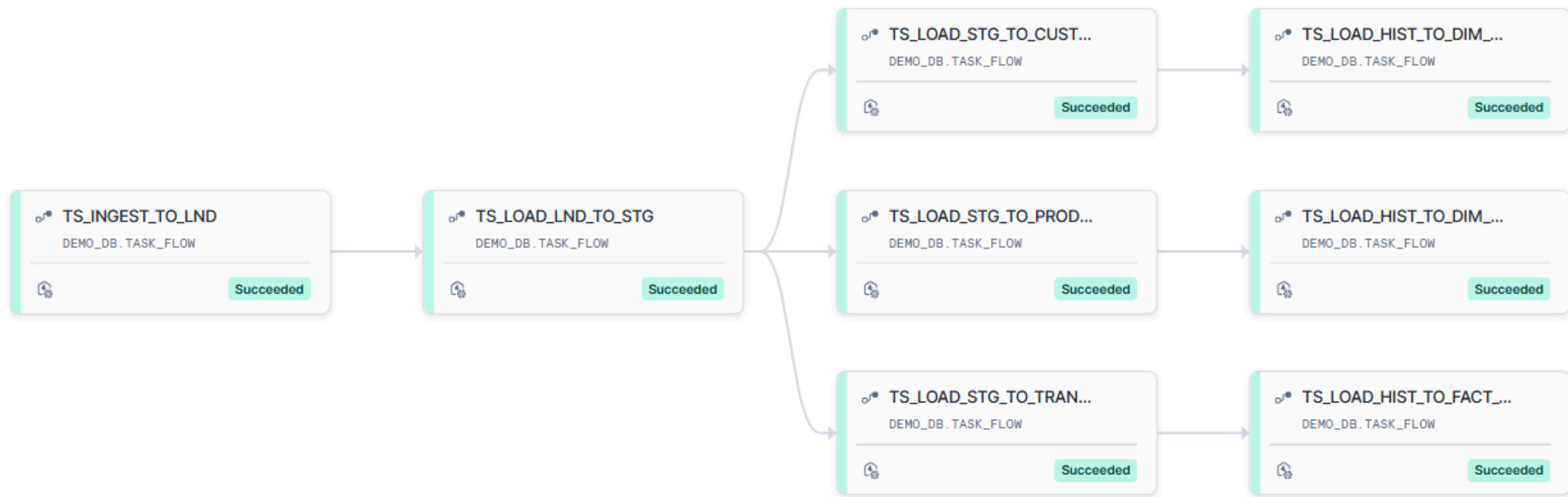
```
md5(concat_ws('||', customer_code)) as primary_checksum,  
md5(  
    concat_ws(  
        '||',  
        coalesce(customer_name, ''),  
        coalesce(contact_person, ''),  
        coalesce(contact_email, ''),  
        coalesce(area_name, ''),  
        coalesce(region_name, '')  
    )  
) as record_checksum,
```

check if a record is updated or inserted

```
2         FINAL_DATA  
3     ) as source ON target.primary_checksum = source.primary_checksum  
4     AND source.insert_or_update = 'U'  
5     AND target.current_flag = 'Y'  
6     WHEN MATCHED THEN  
7     UPDATE  
8     SET  
9         target.update_at = current_timestamp(),  
0         target.end_date = DATEADD(day, -1, current_date()),  
1         target.current_flag = 'N'  
2     WHEN NOT MATCHED THEN  
3     INSERT
```

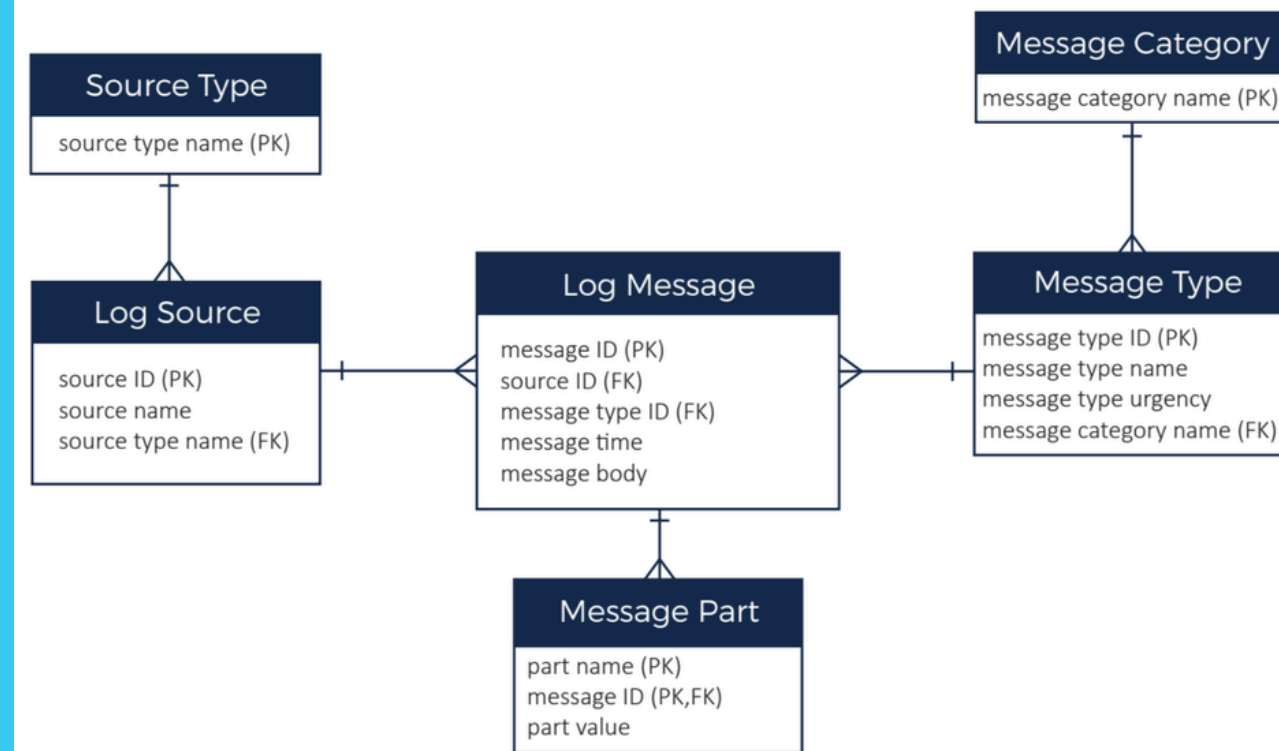
TASK SCHEDULE







TS_INGEST_TO_LND	SP_LOAD_RAW_TO_LND()
TS_LOAD_LND_TO_STG	SP_LOAD_LND_TO_STG()
TS_LOAD_STG_TO_PRODUCT_HIST	SP_LOAD_TO_PRODUCT_HIST()
TS_LOAD_STG_TO_CUSTOMER_HIST	SP_LOAD_TO_CUSTOMER_HIST()
TS_LOAD_STG_TO_TRANSACTION_HIST	SP_LOAD_TO_TRANSACTION_HIST()
TS_LOAD_HIST_TO_DIM_CUSTOMER	SP_LOAD_TO_DIM_CUSTOMER()
TS_LOAD_HIST_TO_DIM_PRODUCT	SP_LOAD_TO_DIM_PRODUCT
TS_LOAD_HIST_TO_FACT_TRANSACTION	SP_LOAD_TO_FACT_TRANSACTION()


DATA MODELING



dim_customer	
customer_code 	STRING
customer_name	STRING
contact_person	STRING
contact_email	STRING
area_name	STRING
region_name	STRING

fact_transaction_sales	
invoice_code	STRING
customer_code	STRING
product_code	STRING
price	FLOAT
quantity	INT
invoice_date	DATE
created_at	TIMESTAMP

dim_product	
product_code 	STRING
product_name	STRING

dim_date	
date 	DATE
day	int
month	int
year	int

fact_daily_target	
date_key	DATE
target	FLOAT

