

```
use role developer;

use database DEBADATTA_MOHANTY_DB;

create schema Load_json_Debadatta;

use schema Load_json_Debadatta;


create table customer like training_wh_schema.customer;

create table lineitem like training_wh_schema.lineitem;

create table nation like training_wh_schema.nation;

create table orders like training_wh_schema.orders;

create table part like training_wh_schema.part;

create table partsupp like training_wh_schema.partsupp;

create table region like training_wh_schema.region;

create table supplier like training_wh_schema.supplier;
```

```
select count(*) from customer;
```

```
CREATE FILE FORMAT JSON_INPUT_FORMAT TYPE = 'JSON' COMPRESSION = 'AUTO' ENABLE_OCTAL = FALSE
```

```
ALLOW_DUPLICATE = FALSE STRIP_OUTER_ARRAY = TRUE STRIP_NULL_VALUES = TRUE
IGNORE_UTF8_ERRORS = TRUE;
```

```
--create stage
```

```
create or replace stage JSON_INPUT_STAGE file_format = JSON_INPUT_FORMAT;
```

```
list @json_input_stage;
```

```
--upload dat into internal stage
```

```
/*
```

```
put file:///C:/Users/Snowflake43/Downloads/SnowflakeLabShare_PM/Data/JSONData/customer/*.json
@json_input_stage/json_input/customer/ AUTO_COMPRESS=FALSE SOURCE_COMPRESSION = NONE
OVERWRITE = FALSE PARALLEL =4;
```

```
*/
```

```
/*
```

```
put file://C:\Users\snowflake35\Downloads\snowflake\Data\JSON\customer\*.json  
@json_input_stage/json_input/customer/uncompressed/data/ AUTO_COMPRESS = TRUE  
SOURCE_COMPRESSION = AUTO_DETECT OVERWRITE= FALSE PARALLEL =4;
```

```
*/
```

```
select count(*) from '@json_input_stage/json_input/customer/uncompressed/data/';
```

```
select $1,metadata$filename,metadata$file_row_number from  
'@json_input_stage/json_input/customer/uncompressed/data/';
```

```
--select $1 from '@json_input_stage/json_input/customer/uncompressed/data/';
```

```
--create transient table JSON_CUSTOMER_TABLE(col1 variant);
```

```
--COPY INTO JSON_CUSTOMER_TABLE FROM  
'@json_input_stage/json_input/customer/uncompressed/data/'  
--FILE FORMAT = 'JSON_INPUT_FORMAT' ON_ERROR = 'CONTINUE' PURGE = FALSE;
```

```
select * from '@json_input_stage/json_input/customer/uncompressed/data/customer_0_0_0.json.gz';-  
-json_input/customer/uncompressed/data/customer_0_0_0.json.gz
```

```
select $1:NAME from  
'@json_input_stage/json_input/customer/uncompressed/data/customer_0_0_0.json.gz';
```

```
select $1:NAME , $1:PHONE from  
'@json_input_stage/json_input/customer/uncompressed/data/customer_0_0_0.json.gz';
```

```
{  
  "ACCTBAL": 711.56,  
  "ADDRESS": "IVhziApeRb ot,c,E",  
  "COMMENT": "to the even, regular platelets. regular, ironic epitaphs nag e",  
  "CUSTKEY": 1,  
  "MKTSEGMENT": "BUILDING",  
  "NAME": "Customer#000000001",  
  "NATIONKEY": 15,  
  "PHONE": "25-989-741-2988"  
}
```

```
select $1 from '@json_input_stage/json_input/customer/' limit 10;
```

```
drop table JSON_CUSTOMER_TABLE;
```

```
-- create stage table
```

```
create or replace table JSON_CUSTOMER_TABLE
```

```
(col1 variant,
```

```
  filename_json string,
```

```
  filerow_num number,
```

```
  dts_json timestamp_ltz(9)
```

```
);
```

```
create or replace table JSON_CUSTOMER_TABLE
```

```
(col1 variant);
```

```
-- COPY data into Stage Table
```

```
COPY INTO JSON_CUSTOMER_TABLE FROM (select $1, metadata$filename,  
metadata$file_row_number,
```

```
                current_timestamp from  
'@json_input_stage/json_input/customer/uncompressed/data/'  
                (file_format => JSON_INPUT_FORMAT))
```

```
on_error = skip_file PURGE = FALSE;
```

```
COPY INTO JSON_CUSTOMER_TABLE FROM (select $1 from  
'@json_input_stage/json_input/customer/uncompressed/data/'
```

```
                (file_format => JSON_INPUT_FORMAT))  
  
on_error = skip_file PURGE = FALSE;
```

```
select * from JSON_CUSTOMER_TABLE limit 10;
```

```
select
```

```
$1:ACCTBAL::FLOAT,
```

```
$1:ADDRESS::STRING
```

```
,$1:MKTSEGMENT::STRING
```

```
,$1:PHONE::STRING
```

```
,$1:COMMENT::STRING
```

```
,$1:NAME::STRING
```

```
,$1:CUSTKEY::NUMBER
```

```
,$1:NATIONKEY::NUMBER
```

```
from JSON_CUSTOMER_TABLE limit 10;
```

```
insert into customer (C_ADDRESS,
```

```
C_MKTSEGMENT
```

```
,C_PHONE
```

```
,C_COMMENT
,C_NAME
,C_CUSTKEY
,C_NATIONKEY
,C_ACCTBAL)
select $1:ADDRESS::STRING
,$1:MKTSEGMENT::STRING
,$1:PHONE::STRING
,$1:COMMENT::STRING
,$1:NAME::STRING
,$1:CUSTKEY::NUMBER
,$1:NATIONKEY::NUMBER
,$1:ACCTBAL::NUMBER from JSON_CUSTOMER_TABLE;
```

```
truncate table customer;
```

```
alter table customer add column add_file_name varchar;
alter table customer add column add_file_row_num number;
alter table customer add column add_date timestamp_NTZ;
alter table customer add column upd_file_name varchar;
alter table customer add column upd_file_row_num number;
alter table customer add column upd_date timestamp_NTZ;
```

```
insert into customer (C_ADDRESS,
C_MKTSEGMENT
,C_PHONE
,C_COMMENT
```

```
,C_NAME
,C_CUSTKEY
,C_NATIONKEY
,C_ACCTBAL
,add_file_name
,add_file_row_num
,add_date)
select $1:ADDRESS::STRING
,$1:MKTSEGMENT::STRING
,$1:PHONE::STRING
,$1:COMMENT::STRING
,$1:NAME::STRING
,$1:CUSTKEY::NUMBER
,$1:NATIONKEY::NUMBER
,$1:ACCTBAL::NUMBER
,filename_json
,filerow_num
,dts_json
from JSON_CUSTOMER_TABLE;
```

```
create or replace view JSON_CUS_FVIEW_DET
as
(select $1:ADDRESS::STRING as ADDRESS
,$1:MKTSEGMENT::STRING as MKTSEGMENT
,$1:PHONE::STRING as PHONE
,$1:COMMENT::STRING as COMMENT
,$1:NAME::STRING as NAME
,$1:CUSTKEY::NUMBER as CUSTKEY
```

```
, $1:NATIONKEY::NUMBER as NATIONKEY
```

```
, $1:ACCTBAL::FLOAT as ACCTBAL
```

```
, filename_json
```

```
, filerow_num
```

```
, dts_json
```

```
from JSON_CUSTOMER_TABLE );
```

```
select * from JSON_CUS_FVIEW_DET;
```

```
merge into customer cc using JSON_CUS_FVIEW_DET jv
```

```
on cc.C_CUSTKEY = jv.CUSTKEY
```

```
when not matched then
```

```
insert (C_CUSTKEY,C_NAME,C_ADDRESS,C_PHONE,C_ACCTBAL,C_MKTSEGMENT,  
C_COMMENT,C_NATIONKEY,ADD_FILE_NAME,ADD_FILE_ROW_NUM, ADD_DATE)
```

```
values (
```

```
jv.CUSTKEY,jv.NAME,jv.ADDRESS,jv.PHONE,jv.ACCTBAL,jv.MKTSEGMENT,jv.COMMENT,jv.NATIONKEY  
,jv.FILENAME_JSON,jv.FILEROW_NUM,jv.DTS_JSON)
```

```
when matched then
```

```
update set C_ACCTBAL = jv.ACCTBAL,UPD_FILE_NAME= jv.FILENAME_JSON, UPD_FILE_ROW_NUM =  
jv.FILEROW_NUM, UPD_DATE = jv.DTS_JSON;
```

```
select count(*) from customer;
```

```
select * from customer limit 10;
```

```
list @json_input_stage;
```

```
remove @json_input_stage;
```

```
select $1 from @json_input_stage/json_input/customer/customer_1_0_0.json;
```

```
select
```

```
$1:ACCTBAL::FLOAT,
```

```
$1:ADDRESS::STRING
```

```
, $1:MKTSEGMENT::STRING
```

```
, $1:PHONE::STRING
```

```
, $1:COMMENT::STRING
```

```
, $1:NAME::STRING
```

```
, $1:CUSTKEY_NEW::NUMBER
```

```
, $1:NATION_DET.NATIONKEY::NUMBER
```

```
from @json_input_stage/json_input/customer/customer_1_0_0.json limit 10;
```

```
--External Stage
```

```
-- Object Storage Location s3://snowflake-workshop-lab/weather-nyc
```

```
-----  
-----
```

```
--upload dat into internal stage
```

```
/*
```



```
put file://C:\Users\Snowflake43\Downloads\SnowflakeLabShare_PM\Data\JSONData\lineitem\*.json
@json_input_stage/json_input/lineitemr/ AUTO_COMPRESS=FALSE SOURCE_COMPRESSION = NONE
OVERWRITE = FALSE PARALLEL =4;
```

```
*/
```

```
select * from '@json_input_stage/json_input/lineitem/uncompressed/data/';
```

```
select $1,metadata$filename,metadata$file_row_number from
 '@json_input_stage/json_input/customer/uncompressed/data/';
```

```
select * from '@json_input_stage/json_input/customer/uncompressed/data/customer_0_0_0.json.gz';-
-json_input/customer/uncompressed/data/customer_0_0_0.json.gz
```

```
select $1:NAME from
 '@json_input_stage/json_input/customer/uncompressed/data/customer_0_0_0.json.gz';
```

```
select $1:NAME , $1:PHONE from
 '@json_input_stage/json_input/customer/uncompressed/data/customer_0_0_0.json.gz';
```

```
{
  "ACCTBAL": 711.56,
  "ADDRESS": "IVhzIApeRb ot,c,E",
  "COMMENT": "to the even, regular platelets. regular, ironic epitaphs nag e",
  "CUSTKEY": 1,
  "MKTSEGMENT": "BUILDING",
  "NAME": "Customer#000000001",
  "NATIONKEY": 15,
  "PHONE": "25-989-741-2988"
}
```

```
select $1 from '@json_input_stage/json_input/customer/' limit 10;
```

```
drop table JSON_CUSTOMER_TABLE;
```

```
-- create stage table
```

```
create or replace table JSON_LINEITEM_TABLE
```

```
(col1 variant,
```

```
  filename_json string,
```

```
  filerow_num number,
```

```
  dts_json timestamp_ltz(9)
```

```
);
```

```
create or replace table JSON_CUSTOMER_TABLE
```

```
(col1 variant);
```

```
-- COPY data into Stage Table
```

```
COPY INTO JSON_LINEITEM_TABLE FROM (select $1, metadata$filename, metadata$file_row_number,
```

```
      current_timestamp from
```

```
'@json_input_stage/json_input/lineitem/uncompressed/data/'
```

```
      (file_format => JSON_INPUT_FORMAT))
```

```
on_error = skip_file PURGE = FALSE;
```

```
COPY INTO JSON_CUSTOMER_TABLE FROM (select $1 from
```

```
'@json_input_stage/json_input/customer/uncompressed/data/'
```

```
      (file_format => JSON_INPUT_FORMAT))
```

```
on_error = skip_file PURGE = FALSE;
```

```
select * from JSON_LINEITEM_TABLE limit 10;
```

```
select
$1:"COMMENT",
$1:"COMMITDATE",
$1:"DISCOUNT",
$1:"EXTENDEDPRICE",
$1:"LINENUMBER",
$1:"LINESTATUS",
$1:"ORDERKEY",
$1:"PARTKEY",
$1:"QUANTITY",
$1:"RECEIPTDATE",
$1:"SHIPDATE",
$1:"SHIPINSTRUCT",
$1:"SHIPMODE",
$1:"SUPPKEY",
$1:"TAX"
from JSON_LINEITEM_TABLE limit 10;
```

```
select * from LINEITEM;
```

```
insert into LINEITEM (
L_COMMENT,
L_COMMITDATE ,
L_DISCOUNT ,
L_EXTENDEDPRICE ,
L_LINENUMBER ,
L_LINESTATUS ,
L_ORDERKEY ,
```

```
L_PARTKEY ,  
L_QUANTITY ,  
L_RECEIPTDATE ,  
L_SHIPDATE ,  
L_SHIPINSTRUCT ,  
L_SHIPMODE ,  
L_SUPPKEY ,  
L_TAX)  
select  
$1:"COMMENT",  
$1:"COMMITDATE",  
$1:"DISCOUNT",  
$1:"EXTENDEDPRICE",  
$1:"LINENUMBER",  
$1:"LINESTATUS",  
$1:"ORDERKEY",  
$1:"PARTKEY",  
$1:"QUANTITY",  
$1:"RECEIPTDATE",  
$1:"SHIPDATE",  
$1:"SHIPINSTRUCT",  
$1:"SHIPMODE",  
$1:"SUPPKEY",  
$1:"TAX" from JSON_LINEITEM_TABLE;
```

```
truncate table LINEITEM;
```

```
alter table lineitem add column add_file_name varchar;
```

```
alter table lineitem add column add_file_row_num number;
alter table lineitem add column add_date timestamp_NTZ;
alter table lineitem add column upd_file_name varchar;
alter table lineitem add column upd_file_row_num number;
alter table lineitem add column upd_date timestamp_NTZ;
```

```
select * from LINEITEM;
```

```
insert into LINEITEM (
```

```
L_COMMENT,
```

```
L_COMMITDATE ,
```

```
L_DISCOUNT ,
```

```
L_EXTENDEDPRICE ,
```

```
L_LINENUMBER ,
```

```
L_LINESTATUS ,
```

```
L_ORDERKEY ,
```

```
L_PARTKEY ,
```

```
L_QUANTITY ,
```

```
L_RECEIPTDATE ,
```

```
L_SHIPDATE ,
```

```
L_SHIPINSTRUCT ,
```

```
L_SHIPMODE ,
```

```
L_SUPPKEY ,
```

```
L_TAX
```

```
,add_file_name
```

```
,add_file_row_num
```

```
,add_date);
```

```
select
```

```
$1:"COMMENT",  
$1:"COMMITDATE",  
$1:"DISCOUNT",  
$1:"EXTENDEDPRICE",  
$1:"LINENUMBER",  
$1:"LINESTATUS",  
$1:"ORDERKEY",  
$1:"PARTKEY",  
$1:"QUANTITY",  
$1:"RECEIPTDATE",  
$1:"SHIPDATE",  
$1:"SHIPINSTRUCT",  
$1:"SHIPMODE",  
$1:"SUPPKEY",  
$1:"TAX"  
,filename_json  
,filerow_num  
,dts_json  
from JSON_CUSTOMER_TABLE;
```

```
insert into LINEITEM (  
L_COMMENT,  
L_COMMITDATE ,  
L_DISCOUNT ,  
L_EXTENDEDPRICE ,  
L_LINENUMBER ,  
L_LINESTATUS ,  
L_ORDERKEY ,  
L_PARTKEY ,
```

```
L_QUANTITY ,
L_RECEIPTDATE ,
L_SHIPDATE ,
L_SHIPINSTRUCT ,
L_SHIPMODE ,
L_SUPPKEY ,
L_TAX
,add_file_name
,add_file_row_num
,add_date)
select
$1:"COMMENT",
$1:"COMMITDATE",
$1:"DISCOUNT",
$1:"EXTENDEDPRICE",
$1:"LINENUMBER",
$1:"LINESTATUS",
$1:"ORDERKEY",
$1:"PARTKEY",
$1:"QUANTITY",
$1:"RECEIPTDATE",
$1:"SHIPDATE",
$1:"SHIPINSTRUCT",
$1:"SHIPMODE",
$1:"SUPPKEY",
$1:"TAX"
,filename_json
,filerow_num
,dts_json
```

```
from JSON_LINEITEM_TABLE;
```

```
CREATE OR REPLACE VIEW lineitem_TABLE_VIEW as (
```

```
select
```

```
$1:"COMMENT" AS COMMENT,
```

```
$1:"COMMITDATE" AS COMMITDATE,
```

```
$1:"DISCOUNT" AS DISCOUNT,
```

```
$1:"EXTENDEDPRICE" AS EXTENDEDPRICE,
```

```
$1:"LINENUMBER" AS LINENUMBER,
```

```
$1:"LINESTATUS" AS LINESTATUS,
```

```
$1:"ORDERKEY" AS ORDERKEY,
```

```
$1:"PARTKEY" AS PARTKEY,
```

```
$1:"QUANTITY" AS QUANTITY,
```

```
$1:"RECEIPTDATE" AS RECEIPTDATE,
```

```
$1:"SHIPDATE" AS SHIPDATE,
```

```
$1:"SHIPINSTRUCT" AS SHIPINSTRUCT,
```

```
$1:"SHIPMODE" AS SHIPMODE,
```

```
$1:"SUPPKEY" AS SUPPKEY,
```

```
$1:"TAX" AS TAX
```

```
,filename_json
```

```
,filerow_num
```

```
,dts_json
```

```
from JSON_LINEITEM_TABLE);
```

```
select * from JSON_CUS_FVIEW_DET;
```

```
select
```

```
$1:ACCTBAL::FLOAT,
```

```
$1:ADDRESS::STRING
```



```
,$1:MKTSEGMENT::STRING  
,$1:PHONE::STRING  
,$1:COMMENT::STRING  
,$1:NAME::STRING  
,$1:CUSTKEY_NEW::NUMBER  
,$1:NATION_DET.NATIONKEY::NUMBER  
from @json_input_stage/json_input/customer/customer_1_0_0.json limit 10;
```

--External Stage

-- Object Storage Location s3://snowflake-workshop-lab/weather-nyc