ASSESSMENT 1

STEP 1: EXTRACT DATA FROM SQL SERVER

```
jdbc_hostname = "snowyuva.database.windows.net"
jdbc_port = 1433
database_name = "mydatabase"
username = "yuva"
password = "Theshitha3102004


jdbc_url = f"jdbc:sqlserver://{jdbc_hostname}:{jdbc_port};databaseName={database_name}"


connection_properties = {
    "user": username,
    "password": password,
    "driver": "com.microsoft.sqlserver.jdbc.SQLServerDriver"
}


# Load data from a table (e
sales_df = spark.read.jdbc(
    url=jdbc_url,
    table="dbo.Sales",
    properties=connection_properties
)


# Preview data
sales_df.show()


INSTALL  SNOWFLAKES


%pip install snowflake-connector-python[pandas]
%restart_python
%pip install snowflake-snowpark-python
%restart_python
```

STEP 2: TRANSFORM DATA IN DATABRICKS USING SNOWPARK

```
from snowflake.snowpark import Session
from snowflake.snowpark.functions import col, upper

# Define Snowflake connection parameters
connection_parameters = {
    "account": "KTDXQBL-XH96284",
    "user": "yuva",
    "password": "Yuvasri@310”,
    "role": "SYSADMIN",
    "warehouse": "COMPUTE_WH",
    "database": "AZURE_SNOWPARK",
    "schema": "MY_SCHEMA"
}

# Create Snowflake session
session = Session.builder.configs(connection_parameters).create()

# Convert PySpark DataFrame to Pandas
sales_pd = sales_df.toPandas()

# Create Snowpark DataFrame from Pandas DataFrame
snowpark_df = session.create_dataframe(sales_pd)

# Apply transformations using quoted column names
snowpark_df = (
    snowpark_df.filter(col('"Amount"') > 100)
    .with_column('"CustomerName"', upper(col('"CustomerName"')))
)

# Display the transformed Snowpark DataFrame
display(snowpark_df)
```

STEP 3: LOAD DATA INTO SNOWFLAKE

```
# Write the transformed Snowpark DataFrame to a table in Snowflake
snowpark_df.write.save_as_table("SALES_CLEANED", mode="overwrite")
```

STEP 4: VERIFY IN SNOWFLAKE

```
# Load the table back into Snowpark
loaded_df = session.table("SALES_CLEANED")

# Preview data
loaded_df.show()
```

STEP5: VERIFY IN SNOWFLAKE

RUN THIS IN SNOWFLAKE:

```
USE DATABASE  AZURE_SNOWPARK;
USE SCHEMA MY_SCHEMA;

SELECT * FROM SALES_CLEANED;
```