# Assignment – 9 SSIS

#### Task 1: Integration with ETL Data Warehouse (DWH)

- Create a Connection Manager to connect to the transactional database and the data warehouse.
- Extract Data from a transactional table (e.g., SalesData) using an OLE DB Source.
- Transform Data:

Apply necessary transformations such as data type conversions, data cleansing, and calculations.

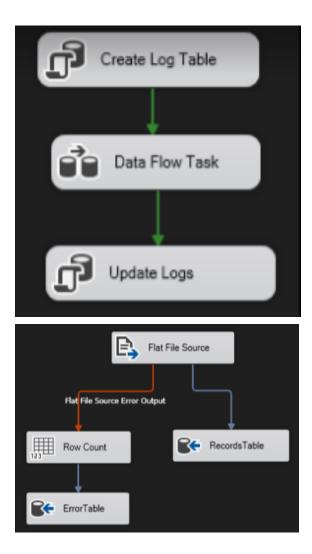
• Load Data into the data warehouse (e.g., FactSales table).



OLE DB Destination

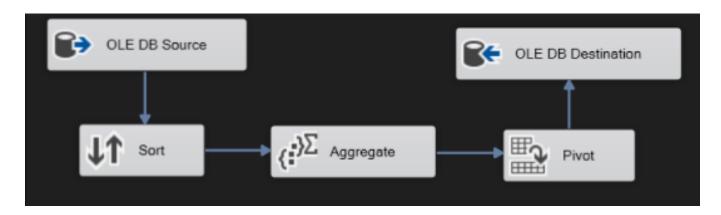
## **Task 2: Data Warehouse Migrations**

- Create Connection Managers for both the source and destination data warehouses.
- Transfer Data from the source data warehouse to the destination using the Data Flow Task.
- Ensure Data Integrity:
- Include checks and balances to ensure data is correctly migrated.
- Log the success or failure of the migration process.



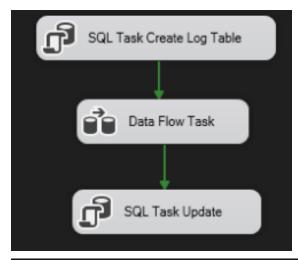
## Task 3: Implementing a Pivot Transformation

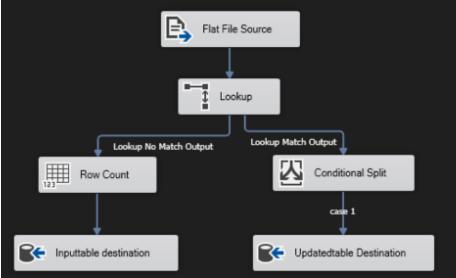
- Extract Data from the source table using an OLE DB Source.
- Apply a Pivot Transformation to transform the normalized data into a pivoted format.
- Load the Pivoted Data into a destination table.



#### Task 4: Incremental Load

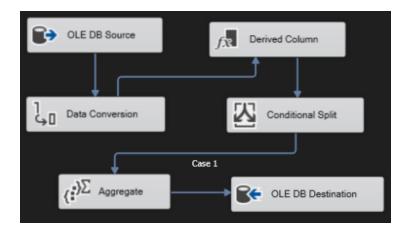
- Identify Changed Data: Use methods such as timestamps, change data capture using lookup, or checksums.
- Extract Only the Changed Data from the source.
- Update the Data Warehouse with the new and changed data only.





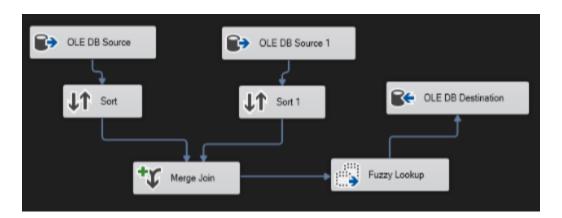
#### **Task 5: Transformations**

- Extract Data from a source table using an OLE DB Source.
- Apply Transformations such as:
- Data Conversion
- Derived Column
- Conditional Split
- Aggregate
- Load Transformed Data into a destination table.



Task 6: MERGE & DERGE & LOOKUP

- Extract Data from two source tables using OLE DB Sources.
- Apply a Merge Join to combine the datasets based on a common key.
- Use Fuzzy Lookup to identify and resolve duplicates in the merged data.
- Load the Cleaned Data into a destination table.



**Task 7: Using Script Task** 

- Add a Script Task to the Control Flow.
- Write a Script: that performs the required transformation. e.g. Reading data from a file, processing it, and
- writing the results to a database table.
- Execute the Script Task within an SSIS package.

