

Data and Query Task (Basic)

1. Create script to create table for each object
 - a. Employee
 - b. PositionHistory
2. Create insert script to inserting data into each table (*Employee and PositionHistory*)
3. Create query to display all employee (*EmployeeId, FullName, BirthDate, Address*) data with their **current** position information (*PosId, PosTitle, EmployeeId, StartDate, EndDate*).

Tables and Samples Data

1. Employee Table

Employee Table

No	Name	Type	Length	Mandatory	Identity	Key	Sample Data
1	Id	Integer		Y	Y	Primary Key	1
2	EmployeeId	String	10	Y	N	Unique Key	10105001
3	FullName	String	100	Y	N		Ali Anton
4	BirthDate	Date		Y	N		19-Aug-82
5	Address	String	500	N	N		Jakarta Utara

Employee Sample Data

Id	EmployeeId	FullName	BirthDate	Address
1	10105001	Ali Anton	19-Aug-82	Jakarta Utara
2	10105002	Rara Siva	1-Jan-82	Mandalika
3	10105003	Rini Aini	20-Feb-82	Sumbawa Besar
3	10105004	Budi	22-Feb-82	Mataram Kota

2. Position Table

Position History Table

No	Name	Type	Length	Mandatory	Identity	Key	Sample Data
1	Id	Integer		Y	Y	Primary Key	1
2	PosId	String	10	Y	N		50001
3	PosTitle	String	100	Y	N		IT Sr. Manager
4	EmployeeId	String	10	Y	N		10105001
5	StartDate	Date		Y	N		1-Mar-2022
6	EndDate	Date		Y	N		31-Dec-2022

Position History Sample Data

Id	PosId	PosTitle	EmployeeID	StartDate	EndDate
1	50000	IT Manager	10105001	1-Jan-2022	28-Feb-2022
2	50001	IT Sr. Manager	10105001	1-Mar-2022	31-Dec-2022

3	50002	Programmer Analyst	10105002	1-Jan-2022	28-Feb-2022
4	50003	Sr. Programmer Analyst	10105002	1-Mar-2022	31-Dec-2022
5	50004	IT Admin	10105003	1-Jan-2022	28-Feb-2022
6	50005	IT Secretary	10105003	1-Mar-2022	31-Dec-2022

ETL, Datawarehouse and Analytics Task

Build and design simple Datawarehouse and analytics data, data source came from 2 different source

1. Employee data, source from Azure
2. Training history, source from GCP (Google Cloud Platform)

Requirement and Details:

1. Azure Employee data is using SQL Server as Database Server. This is database for saving employment data like their employee number, name, birthdate, position/job etc. Each employee has one record for their employment data.
2. Training History data is using Google Worksheet as data platform. The worksheet contains historical data about training that completed by employee. Each employee may have more than one records for their training history data.
3. Design simple ETL Flow that compile these two data sources into Datawarehouse
4. Design simple report that displays historical training data
5. Design simple dashboard that displays
 - a. Total employee completed training each month
 - b. Total training each month