[Batch Maret 2024 - Google Drive](https://drive.google.com/drive/folders/100TbOWvVqE_0ZraFQYI-uCjaKZoGJhD9)

CREATE TABLE

DimBranch

CREATE TABLE [dbo].[DimBranch](

[branch\_id] [int] NOT NULL,

[branch\_name] [varchar](50) NULL,

[branch\_location] [varchar](50) NULL,

CONSTRAINT [PK\_branch] PRIMARY KEY CLUSTERED

(

[branch\_id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

DimCustomer

CREATE TABLE [dbo].[DimCustomer](

[CustomerID] [int] NOT NULL,

[CustomerName] [varchar](50) NULL,

[Address] [varchar](max) NULL,

[CityName] [varchar](50) NULL,

[StateName] [varchar](50) NULL,

[Age] [varchar](3) NULL,

[Gender] [varchar](10) NULL,

[Email] [varchar](50) NULL,

CONSTRAINT [PK\_CustomerID] PRIMARY KEY CLUSTERED

(

[CustomerID] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY] TEXTIMAGE\_ON [PRIMARY]

DimAccount

CREATE TABLE [dbo].[DimAccount](

[account\_id] [int] NOT NULL,

[customer\_id] [int] NULL,

[account\_type] [varchar](10) NULL,

[balance] [int] NULL,

[date\_opened] [datetime2](0) NULL,

[status] [varchar](10) NULL,

CONSTRAINT [PK\_account] PRIMARY KEY CLUSTERED

(

[account\_id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[DimAccount] WITH CHECK ADD CONSTRAINT [FK\_customer\_id] FOREIGN KEY([customer\_id])

REFERENCES [dbo].[DimCustomer] ([CustomerID])

GO

ALTER TABLE [dbo].[DimAccount] CHECK CONSTRAINT [FK\_customer\_id]

FactTransaction

CREATE TABLE [dbo].[FactTransaction](

[transaction\_id] [int] NOT NULL,

[account\_id] [int] NULL,

[transaction\_date] [datetime2](0) NULL,

[amount] [int] NULL,

[transaction\_type] [varchar](50) NULL,

[branch\_id] [int] NULL,

CONSTRAINT [PK\_transaction] PRIMARY KEY CLUSTERED

(

[transaction\_id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[FactTransaction] WITH CHECK ADD CONSTRAINT [FK\_account] FOREIGN KEY([account\_id])

REFERENCES [dbo].[DimAccount] ([account\_id])

GO

ALTER TABLE [dbo].[FactTransaction] CHECK CONSTRAINT [FK\_account]

GO

ALTER TABLE [dbo].[FactTransaction] WITH CHECK ADD CONSTRAINT [FK\_branch] FOREIGN KEY([branch\_id])

REFERENCES [dbo].[DimBranch] ([branch\_id])

GO

ALTER TABLE [dbo].[FactTransaction] CHECK CONSTRAINT [FK\_branch]

GO

CREATE STORE PROCEDURE

DailyTransaction

CREATE OR ALTER PROCEDURE DailyTransaction

@start\_date DATE,

@end\_date DATE

AS

BEGIN

SELECT CAST(transaction\_date AS DATE) AS 'Date',

COUNT(transaction\_id) AS 'TotalTransactions',

SUM(amount) AS 'TotalAmount'

FROM [DWH].[dbo].[FactTransaction]

WHERE transaction\_date BETWEEN @start\_date AND @end\_date

GROUP BY CAST(transaction\_date AS DATE)

END;

EXEC DailyTransaction @start\_date = '2024-01-18', @end\_date = '2024-01-21'

BalancePerCustomer

CREATE OR ALTER PROCEDURE [dbo].[BalancePerCustomer]

@name varchar(255) = '%'

AS

BEGIN

WITH tablea AS (

SELECT

c.transaction\_id,

a.CustomerName,

c.transaction\_date,

b.account\_type,

b.balance,

SUM(c.amount) OVER (PARTITION BY a.customername, b.account\_type) AS 'Amount',

c.transaction\_type

FROM

[DimCustomer] a

LEFT JOIN

DimAccount b ON a.customerid = b.customer\_id

LEFT JOIN

FactTransaction c ON b.account\_id = c.account\_id

WHERE

b.status = 'active'

)

SELECT

DISTINCT CustomerName,

account\_type as 'AccountType',

balance as 'Balance',

CASE

WHEN transaction\_type = 'Deposit' THEN balance + amount

ELSE balance - amount

END AS 'CurrentBalance'

FROM

tablea

WHERE

CustomerName LIKE '%' + @name + '%'

ORDER BY

CustomerName, account\_type;

END;

GO

EXEC [BalancePerCustomer] @name = 'Shelly'

ETL in Talend





































