FAKULTAS SAINS
Institut Teknologi Sumatera

IMPLEMENTASI DATA WAREHOUSE LPPM

QOIS OLIFIO
123450067

HANNA GRESIA SINAGA
123450038

NATHANAEL DANIEL SANTOSO
122450059

CITRA AGUSTIN
123450108

FAKULTAS SAINS
Institut Teknologi Sumatera

DEMO TUGAS BESAR PERGUDANGAN DATA

LEMBAGA PENELITIAN DAN PENGABDIAN MASYARAKAT

DATA AKTIVITAS LPPM, SEPERTI PROPOSAL RISET, PUBLIKASI, DAN KKN, SAAT INI TERPISAH-PISAH DI BERBAGAI SISTEM OPERASIONAL (SIPPM, WEB KKN). AKIBATNYA, LPPM KESULITAN UNTUK MELIHAT TREN KINERJA PENELITI SECARA HISTORIS DAN MENYELURUH. TUJUAN UTAMA KAMI ADALAH MEMBANGUN DATA MART YANG TERINTEGRASI UNTUK MENJAWAB PERTANYAAN STRATEGIS. KAMI MENGGUNAKAN ARSITEKTUR DIMENSIONAL MODELING DARI KIMBALL, ATAU YANG DIKENAL SEBAGAI STAR SCHEMA.

LEMBAGA PENELITIAN DAN PENGABDIAN MASYARAKAT

Fact_Proposal
ProposalKey DateKey_Pengajuan DateKey_Keputusan PenelitiKey_Ketua ProdiKey_Ketua PusatRisetKey_Afiliasi SkemaKey Jumlah_Proposal (Measure) Dana_Diajukan (Measure) Dana_Disetujui (Measure) Lama_Review_Hari (Measure) Status_Proposal (Degenerate Dimension)

Fact_Authorship
PenelitiKey PublikasiKey DateKey_Terbit ProdiKey PusatRisetKey Urutan Penulis (Degenerate Dimension) Jumlah Sitasi (Measure)

Fact_KKN
PelaksanaanKey DateKey_Mulai MahasiswaKey LokasiKey PenelitiKey_DPL Jumlah Mahasiswa (Measure) Periode_KKN (Degenerate Dimension)

Tabel_Dim
• **Dim_Peneliti** • **Dim_Prodi** • **Dim_PusatRiset** • **Dim_Skema** • **Dim_Publikas** • **Dim_Lokasi** • **Dim_Mahasiswa** • **Dim_Date**

```
/*
================================================================================
FILE: 01_Create_Database.sql
DESKRIPSI: Membuat Database Baru & Skema Staging
DATABASE: DW_LPPM (Kelompok 5)
================================================================================
*/

USE master;
GO

-- 1. HAPUS DATABASE LAMA (JIKA ADA) AGAR BERSIH
-- Script ini akan memaksa putus semua koneksi sebelum menghapus
IF EXISTS (SELECT * FROM sys.databases WHERE name = 'DW_LPPM')
BEGIN
    ALTER DATABASE DW_LPPM SET SINGLE_USER WITH ROLLBACK IMMEDIATE;
    DROP DATABASE DW_LPPM;
END
GO

-- 2. BUAT DATABASE BARU
CREATE DATABASE DW_LPPM;
GO

-- 3. GUNAKAN DATABASE
USE DW_LPPM;
GO

-- 4. BUAT SKEMA KHUSUS (STAGING AREA)
-- Schema ini untuk memisahkan tabel staging (data mentah) dari tabel inti
CREATE SCHEMA stg;
GO
```

```sql
/*
================================================================================
FILE: 02_Create_Dimensions.sql
DESKRIPSI: Membuat Tabel Dimensi (Data Master)
DATABASE: DW_LPPM (Kelompok 5)
================================================================================
*/

USE DW_LPPM;
GO

-- 1. Dimensi Program Studi
CREATE TABLE Dim_Prodi (
    ProdiKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Kode_Prodi VARCHAR(10),
    Nama_Prodi VARCHAR(150),
    Jurusan VARCHAR(150),
    Fakultas VARCHAR(100)
);

-- 2. Dimensi Pusat Riset
CREATE TABLE Dim_PusatRiset (
    PusatRisetKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Nama_Pusat_Riset VARCHAR(150),
    Nama_Kepala_Pusat VARCHAR(150)
);

-- 3. Dimensi Skema Pendanaan
CREATE TABLE Dim_Skema (
    SkemaKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Nama_Skema VARCHAR(100),
    Jenis_Skema VARCHAR(50),
    Sumber_Dana VARCHAR(50)
);
```

```sql
-- 4. Dimensi Lokasi (Untuk Peta KKN)
CREATE TABLE Dim_Lokasi (
    LokasiKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Nama_Desa VARCHAR(100),
    Kecamatan VARCHAR(100),
    Kabupaten VARCHAR(100),
    Provinsi VARCHAR(100)
);

-- 5. Dimensi Tanggal (Wajib ada)
CREATE TABLE Dim_Date (
    DateKey INT NOT NULL PRIMARY KEY, -- Format YYYYMMDD
    Tanggal DATE,
    Hari INT,
    Bulan INT,
    NamaBulan VARCHAR(20),
    Tahun INT,
    Kuartal INT,
    Semester VARCHAR(20)
);

-- 6. Dimensi Publikasi (REVISI: Nama Kolom Judul_Artikel)
CREATE TABLE Dim_Publikasi (
    PublikasiKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Judul_Artikel VARCHAR(500), -- SUDAH DIPERBAIKI (Bukan 'Judul')
    Jurnal VARCHAR(200),
    Tahun_Terbit INT,
    Kuartil VARCHAR(10),
    Sinta_Rank VARCHAR(10)
);
```

```sql
-- 7. Dimensi Dataset (Untuk Visualisasi Sistem Data)
CREATE TABLE Dim_Dataset (
    DatasetKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Nama_Dataset VARCHAR(200),
    Kategori_Nama VARCHAR(100),
    Format VARCHAR(50)
);

-- 8. Dimensi Kata Kunci (Untuk Visualisasi Pencarian)
CREATE TABLE Dim_KataKunci (
    KataKunciKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Kata_Kunci VARCHAR(100),
    Kategori_Pencarian VARCHAR(100)
);

-- 9. Dimensi Peneliti (Ada FK ke Prodi & Pusat Riset)
CREATE TABLE Dim_Peneliti (
    PenelitiKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    NIDN VARCHAR(20),
    Nama_Peneliti VARCHAR(150),
    Jabatan_Fungsional VARCHAR(50),
    ProdiKey_Afiliasi INT,
    PusatRisetKey_Afiliasi INT,
    IsCurrent BIT DEFAULT 1,
    CONSTRAINT FK_DP_Prodi FOREIGN KEY (ProdiKey_Afiliasi) REFERENCES Dim_Prodi(ProdiKey),
    CONSTRAINT FK_DP_Pusat FOREIGN KEY (PusatRisetKey_Afiliasi) REFERENCES Dim_PusatRiset(Pus
);

-- 10. Dimensi Mahasiswa
CREATE TABLE Dim_Mahasiswa (
    MahasiswaKey INT NOT NULL PRIMARY KEY IDENTITY(1,1),
    NIM VARCHAR(20),
    Nama_Mahasiswa VARCHAR(150),
    ProdiKey INT,
    CONSTRAINT FK_DM_Prodi FOREIGN KEY (ProdiKey) REFERENCES Dim_Prodi(ProdiKey)
);
```

```sql
USE DW_LPPM;
GO

-- 1. Fact Proposal (Transaksi Utama LPPM)
CREATE TABLE Fact_Proposal (
    ProposalKey BIGINT NOT NULL PRIMARY KEY IDENTITY(1,1),
    Id_Sumber INT,

    -- Foreign Keys
    DateKey_Pengajuan INT,
    DateKey_Keputusan INT,
    PenelitiKey_Ketua INT,
    SkemaKey INT,
    PusatRisetKey_Afiliasi INT,

    -- Measures
    Dana_Diajukan DECIMAL(18,2),
    Dana_Disetujui DECIMAL(18,2),
    Lama_Review_Hari INT,
    Status_Proposal VARCHAR(50),

    -- Constraints
    CONSTRAINT FK_FP_DateAjuan FOREIGN KEY (DateKey_Pengajuan) REFERENCES Dim_Date(DateKey),
    CONSTRAINT FK_FP_DatePutus FOREIGN KEY (DateKey_Keputusan) REFERENCES Dim_Date(DateKey),
    CONSTRAINT FK_FP_Ketua FOREIGN KEY (PenelitiKey_Ketua) REFERENCES Dim_Peneliti(PenelitiKe
    CONSTRAINT FK_FP_Skema FOREIGN KEY (SkemaKey) REFERENCES Dim_Skema(SkemaKey),
    CONSTRAINT FK_FP_Pusat FOREIGN KEY (PusatRisetKey)
```

```sql
USE DW_LPPM;
GO

-- 1. Index untuk Fact_Proposal (Sering difilter berdasarkan Waktu & Pusat Riset)
CREATE NONCLUSTERED INDEX IX_FactProposal_DatePengajuan ON Fact_Proposal(DateKey_Pengajuan);
CREATE NONCLUSTERED INDEX IX_FactProposal_PusatRiset ON Fact_Proposal(PusatRisetKey_Afiliasi)
CREATE NONCLUSTERED INDEX IX_FactProposal_Skema ON Fact_Proposal(SkemaKey);
CREATE NONCLUSTERED INDEX IX_FactProposal_Peneliti ON Fact_Proposal(PenelitiKey_Ketua);

-- 2. Index untuk Fact_KKN (Filter Lokasi & Waktu)
CREATE NONCLUSTERED INDEX IX_FactKKN_Lokasi ON Fact_KKN(LokasiKey);
CREATE NONCLUSTERED INDEX IX_FactKKN_Date ON Fact_KKN(DateKey_Mulai);

-- 3. Index untuk Fact_Authorship (Join ke Peneliti & Publikasi)
CREATE NONCLUSTERED INDEX IX_FactAuthorship_Peneliti ON Fact_Authorship(PenelitiKey);
CREATE NONCLUSTERED INDEX IX_FactAuthorship_Publikasi ON Fact_Authorship(PublikasiKey);

-- 4. Index untuk Fact Tambahan (Dashboard Visualisasi Baru)
CREATE NONCLUSTERED INDEX IX_FactDataset_Date ON Fact_Dataset_Statistik(DateKey_Log);
CREATE NONCLUSTERED INDEX IX_FactSearch_KataKunci ON Fact_Pencarian_Log(KataKunciKey);

GO
```

```sql
USE DW_LPPM;
GO

-- 1. Membuat Fungsi Partisi (Partition Function)
-- Membagi data berdasarkan Tahun (Range Right)
-- Data < 2022, 2022, 2023, 2024, 2025, > 2025
IF EXISTS (SELECT * FROM sys.partition_functions WHERE name = 'pf_TahunProposal')
    DROP PARTITION FUNCTION pf_TahunProposal;
GO

CREATE PARTITION FUNCTION pf_TahunProposal (INT)
AS RANGE RIGHT FOR VALUES (2022, 2023, 2024, 2025, 2026);
GO

-- 2. Membuat Skema Partisi (Partition Scheme)
-- Menyimpan semua partisi ke filegroup PRIMARY (Standar)
IF EXISTS (SELECT * FROM sys.partition_schemes WHERE name = 'ps_TahunProposal')
    DROP PARTITION SCHEME ps_TahunProposal;
GO

CREATE PARTITION SCHEME ps_TahunProposal
AS PARTITION pf_TahunProposal
ALL TO ([PRIMARY]);
GO
```

```sql
USE DW_LPPM;
GO

-- 1. Staging Proposal (Data mentah proposal masuk)
IF OBJECT_ID('stg.Proposal', 'U') IS NOT NULL DROP TABLE stg.Proposal;
CREATE TABLE stg.Proposal (
    Id_Proposal INT,
    Judul_Proposal VARCHAR(MAX),
    Tgl_Pengajuan DATE,
    NIDN_Ketua VARCHAR(50),
    Nama_Skema VARCHAR(100),
    Nama_PusatRiset VARCHAR(150),
    Dana_Ajuan DECIMAL(18,2),
    Status_Proposal VARCHAR(50),
    LoadDate DATETIME DEFAULT GETDATE()
);

-- 2. Staging KKN (Data mentah KKN)
IF OBJECT_ID('stg.KKN', 'U') IS NOT NULL DROP TABLE stg.KKN;
CREATE TABLE stg.KKN (
    Id_KKN INT,
    NIM_Mahasiswa VARCHAR(20),
    NIDN_DPL VARCHAR(50),
    Lokasi_Desa VARCHAR(100),
    Lokasi_Kabupaten VARCHAR(100),
    Tgl_Mulai DATE,
    LoadDate DATETIME DEFAULT GETDATE()
);
```

```sql
-- 3. Staging Publikasi (Data mentah publikasi dosen)
IF OBJECT_ID('stg.Publikasi', 'U') IS NOT NULL DROP TABLE stg.Publikasi;
CREATE TABLE stg.Publikasi (
    Id_Publikasi INT,
    Judul_Artikel VARCHAR(MAX),
    Jurnal VARCHAR(250),
    Tahun INT,
    NIDN_Penulis VARCHAR(50),
    Kuartil VARCHAR(10),
    LoadDate DATETIME DEFAULT GETDATE()
);

-- 4. Staging Logs (Data mentah log sistem untuk visualisasi baru)
IF OBJECT_ID('stg.System_Logs', 'U') IS NOT NULL DROP TABLE stg.System_Logs;
CREATE TABLE stg.System_Logs (
    Log_ID INT,
    Tipe_Log VARCHAR(50), -- 'Download', 'Search'
    Item_Name VARCHAR(200), -- Nama Dataset atau Kata Kunci
    User_Action VARCHAR(50),
    Timestamp DATETIME
);

PRINT '>>> FILE 06 SELESAI: Staging Tables Berhasil Dibuat. <<<';
GO
```

```sql
USE DW_LPPM;
GO

-- Hapus Prosedur Lama jika ada dan buat baru
CREATE OR ALTER PROCEDURE dbo.usp_Master_ETL
AS
BEGIN
    SET NOCOUNT ON;
    PRINT '>>> MEMULAI MASTER ETL PROCESS (GENERATE 50.000 DATA)...';

    -- 1. BERSIHKAN DATA LAMA (TRUNCATE/DELETE)
    -- Urutan delete penting untuk menghindari error Foreign Key
    DELETE FROM Fact_Proposal;
    DELETE FROM Fact_KKN;
    DELETE FROM Fact_Authorship;
    DELETE FROM Fact_Dataset_Statistik;
    DELETE FROM Fact_Pencarian_Log;

    DELETE FROM Dim_Peneliti;
    DELETE FROM Dim_Mahasiswa;
    DELETE FROM Dim_Publikasi;

    -- Reset tabel dimensi statis (opsional, biar bersih aja)
    DELETE FROM Dim_Prodi;
    DELETE FROM Dim_PusatRiset;
    DELETE FROM Dim_Skema;
    DELETE FROM Dim_Lokasi;
    DELETE FROM Dim_Date;
    DELETE FROM Dim_Dataset;
    DELETE FROM Dim_KataKunci;

    -- Reset Identity Columns (Biar ID mulai dari 1 lagi)
    DBCC CHECKIDENT ('Dim_Prodi', RESEED, 0);
    DBCC CHECKIDENT ('Dim_PusatRiset', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Peneliti', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Skema', RESEED, 0);
```

```sql
    DBCC CHECKIDENT ('Dim_PusatRiset', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Peneliti', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Skema', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Lokasi', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Mahasiswa', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Publikasi', RESEED, 0);
    DBCC CHECKIDENT ('Dim_Dataset', RESEED, 0);
    DBCC CHECKIDENT ('Dim_KataKunci', RESEED, 0);
    DBCC CHECKIDENT ('Fact_Proposal', RESEED, 0);
    DBCC CHECKIDENT ('Fact_KKN', RESEED, 0);
    DBCC CHECKIDENT ('Fact_Authorship', RESEED, 0);
    DBCC CHECKIDENT ('Fact_Dataset_Statistik', RESEED, 0);
    DBCC CHECKIDENT ('Fact_Pencarian_Log', RESEED, 0);

    PRINT '-> Data Lama Berhasil Dihapus.';

    -- ======================================================
    -- 2. POPULATE STATIC DIMENSIONS (Data Master Asli ITERA)
    -- ======================================================

    -- Dimensi Prodi
    INSERT INTO Dim_Prodi VALUES
    ('SD','Sains Data','Sains','Fakultas Sains'), ('SA','Sains Aktuaria','Sains','Fakultas Sa
    ('IF','Teknik Informatika','TPI','FTI'), ('PWK','Perencanaan Wilayah','TIK','FTIK'),
    ('AR','Arsitektur','TIK','FTIK'), ('SI','Teknik Sipil','TIK','FTIK'),
    ('TL','Teknik Lingkungan','TIK','FTIK'), ('MA','Matematika','Sains','Fakultas Sains'),
    ('FI','Fisika','Sains','Fakultas Sains'), ('EL','Teknik Elektro','TPI','FTI');

    -- Dimensi Pusat Riset
    INSERT INTO Dim_PusatRiset VALUES
    ('Pusat Mitigasi Gempa','Prof. Harkunti'), ('Pusat Astronomi (OAIL)','Dr. Meezan'),
    ('Pusat Riset Material','Harry Yuliansyah'), ('Pusat Riset Hayati','Dr. Winati'),
    ('Pusat Keamanan Digital','Prof. Sarwono'), ('Pusat Studi Pembangunan','Rinda Gusvita'),
    ('Pusat Integrated Waste','Ir. Rifqi Sufra'), ('Pusat Penelitian Publikasi','Dr. Aditya')
    ('Pusat Pengabdian KKN','Dr. Idra Herlina'), ('Pusat Infrastruktur','Prof. Ibnu Syabri');
```

```sql
    -- Dimensi Lainnya
    INSERT INTO Dim_Skema VALUES ('Hibah Dasar','Penelitian','Internal'), ('Hibah Terapan','I
    INSERT INTO Dim_Lokasi VALUES ('Desa Sabah Balau','Tanjung Bintang','Lampung Selatan','La

    -- Dimensi Dataset & Kata Kunci (Untuk Dashboard Baru)
    INSERT INTO Dim_Dataset VALUES ('Dataset Fasilitas', 'Fasilitas', 'CSV'), ('Dataset Keua
    INSERT INTO Dim_KataKunci VALUES ('beasiswa', 'Kemahasiswaan'), ('inventaris', 'Fasilita

    -- Dimensi Tanggal (2022-2030) - Safe Range agar tidak error FK
    DECLARE @StartDate DATE = '2022-01-01';
    DECLARE @EndDate DATE = '2030-12-31';
    WHILE @StartDate <= @EndDate
    BEGIN
        INSERT INTO Dim_Date VALUES (
            CAST(CONVERT(VARCHAR(8), @StartDate, 112) AS INT),
            @StartDate, DAY(@StartDate), MONTH(@StartDate), DATENAME(MONTH, @StartDate),
            YEAR(@StartDate), DATEPART(QUARTER, @StartDate),
            CASE WHEN MONTH(@StartDate) <= 6 THEN 'Genap' ELSE 'Ganjil' END
        );
        SET @StartDate = DATEADD(DAY, 1, @StartDate);
    END

    -- Dimensi Dosen (250) & Mahasiswa (1000)
    DECLARE @i INT = 1;
    WHILE @i <= 250 BEGIN INSERT INTO Dim_Peneliti VALUES (CONCAT('00',100+@i), CONCAT('Dose
    SET @i = 1;
    WHILE @i <= 1000 BEGIN INSERT INTO Dim_Mahasiswa VALUES (CONCAT('121',@i), CONCAT('Mhs '

    -- Dimensi Publikasi (Dummy)
    SET @i = 1;
    WHILE @i <= 5000 BEGIN INSERT INTO Dim_Publikasi VALUES (CONCAT('Publikasi Topik ',@i),

    PRINT '-> Dimensi Selesai Diisi.';
```

```sql
    -- ======================================================
    -- 3. POPULATE FACTS (50.000 ROWS)
    -- ======================================================

    -- A. Fact Proposal (50k)
    PRINT 'Sedang generate 50.000 data proposal...';
    DECLARE @x INT = 1;
    DECLARE @RandDateKey INT;
    DECLARE @RandDateObj DATE;
    DECLARE @NewDateKey INT;

    WHILE @x <= 50000
    BEGIN
        -- Logika Tanggal Aman (Fix Error Sebelumnya)
        SELECT TOP 1 @RandDateKey = DateKey FROM Dim_Date WHERE Tahun BETWEEN 2022 AND 2025 O
        SET @RandDateObj = CAST(CAST(@RandDateKey AS CHAR(8)) AS DATE);
        -- Keputusan +0 s.d 90 hari (Aman karena kalender sampai 2030)
        SET @NewDateKey = CAST(CONVERT(VARCHAR(8), DATEADD(DAY, (ABS(CHECKSUM(NEWID())) % 90)

        INSERT INTO Fact_Proposal VALUES (
            100000+@x, @RandDateKey, @NewDateKey,
            (ABS(CHECKSUM(NEWID()))%250)+1, (ABS(CHECKSUM(NEWID()))%4)+1, (ABS(CHECKSUM(NEWID
            (ABS(CHECKSUM(NEWID()))%100 + 10) * 1000000,
            (ABS(CHECKSUM(NEWID()))%100) * 1000000,
            30, 'Diterima'
        );
        SET @x = @x + 1;
    END

    -- B. Fact KKN & Authorship & Logs (Sisa)
    SET @x = 1;
    WHILE @x <= 5000 BEGIN INSERT INTO Fact_KKN VALUES (20240601, (ABS(CHECKSUM(NEWID()))%3)+
    SET @x = 1;
    WHILE @x <= 500
```

```sql
USE DW_LPPM;
GO
PRINT '>>> MULAI PENGECEKAN KUALITAS DATA (QA CHECKS) <<<';
-- 1. CEK KELENGKAPAN (COMPLETENESS)
-- Memastikan tidak ada Foreign Key yang NULL di Tabel Fakta Utama
SELECT
    'Fact_Proposal' AS TableName,
    'Check Null Foreign Keys' AS Test_Name,
    COUNT(*) AS Failed_Rows,
    CASE WHEN COUNT(*) = 0 THEN 'PASS' ELSE 'FAIL' END AS Status
FROM Fact_Proposal
WHERE DateKey_Pengajuan IS NULL
   OR PenelitiKey_Ketua IS NULL
   OR SkemaKey IS NULL;

-- 2. CEK LOGIKA BISNIS (CONSISTENCY)
-- Dana Disetujui TIDAK BOLEH lebih besar dari Dana Diajukan
SELECT
    'Fact_Proposal' AS TableName,
    'Check Dana Logic (Setuju <= Ajuan)' AS Test_Name,
    COUNT(*) AS Failed_Rows,
    CASE WHEN COUNT(*) = 0 THEN 'PASS' ELSE 'FAIL' END AS Status
FROM Fact_Proposal
WHERE Dana_Disetujui > Dana_Diajukan;

-- 3. CEK INTEGRITAS REFERENSI (ORPHAN CHECK)
-- Memastikan Peneliti di Tabel Fakta benar-benar ada di Tabel Dimensi
SELECT
    'Fact_Proposal' AS TableName,
    'Check Orphan Peneliti' AS Test_Name,
    COUNT(*) AS Orphan_Count,
    CASE WHEN COUNT(*) = 0 THEN 'PASS' ELSE 'FAIL' END AS Status
FROM Fact_Proposal f
LEFT JOIN Dim_Peneliti d ON f.PenelitiKey_Ketua = d.PenelitiKey
WHERE d.PenelitiKey IS NULL;

-- 4. CEK VOLUME DATA (DATA VOLUME)
-- Memastikan jumlah data memenuhi target (50.000++)
SELECT
    'Fact_Proposal' AS TableName,
    'Check Minimum Volume (50k)' AS Test_Name,
    COUNT(*) AS Total_Rows,
    CASE WHEN COUNT(*) >= 50000 THEN 'PASS' ELSE 'FAIL' END AS Status
FROM Fact_Proposal;

PRINT '>>> PENGECEKAN SELESAI. SILAKAN SCREENSHOT HASILNYA UNTUK LAPORAN. <<<';
GO
```

```sql
USE DW_LPPM;
GO

-- Aktifkan pencatatan waktu eksekusi
SET STATISTICS TIME ON;
SET STATISTICS IO ON;

PRINT '============================================================';
PRINT 'TEST 1: ANALISIS TOTAL DANA PER PUSAT RISET (AGREGASI)';
PRINT '============================================================';

SELECT
    pr.Nama_Pusat_Riset,
    COUNT(fp.ProposalKey) AS Jumlah_Proposal,
    FORMAT(SUM(fp.Dana_Diajukan), 'C', 'id-ID') AS Total_Dana_Ajuan,
    FORMAT(SUM(fp.Dana_Disetujui), 'C', 'id-ID') AS Total_Dana_Setuju,
    AVG(fp.Lama_Review_Hari) AS Avg_Review_Days
FROM Fact_Proposal fp
JOIN Dim_PusatRiset pr ON fp.PusatRisetKey_Afiliasi = pr.PusatRisetKey
GROUP BY pr.Nama_Pusat_Riset
ORDER BY SUM(fp.Dana_Disetujui) DESC;


PRINT '============================================================';
PRINT 'TEST 2: TREN PROPOSAL PER TAHUN & SEMESTER (TIME SERIES)';
PRINT '============================================================';

SELECT
    d.Tahun,
    d.Semester,
    s.Jenis_Skema,
    COUNT(fp.ProposalKey) AS Total_Proposal,
    SUM(CASE WHEN fp.Status_Proposal = 'Diterima' THEN 1 ELSE 0 END) AS Accepted
FROM Fact_Proposal fp
JOIN Dim_Date d ON fp.DateKey_Pengajuan = d.DateKey
JOIN Dim_Skema s ON fp.SkemaKey = s.SkemaKey
GROUP BY d.Tahun, d.Semester, s.Jenis_Skema
ORDER BY d.Tahun, d.Semester;

-- Matikan statistik
SET STATISTICS TIME OFF;
SET STATISTICS IO OFF;
GO
```

```sql
USE DW_LPPM;
GO
-- 1. VIEW EXECUTIVE (KPI & Tren Proposal)
-- Digunakan untuk Halaman 1 Dashboard (Overview)
CREATE OR ALTER VIEW vw_Proposal_Analytics AS
SELECT
    d.Tahun,
    d.Kuartal,
    d.NamaBulan,
    d.Bulan, -- Penting untuk sorting Januari, Februari...
    pr.Nama_Pusat_Riset,
    s.Nama_Skema,
    s.Jenis_Skema,
    s.Sumber_Dana,
    COUNT(fp.ProposalKey) AS Total_Proposal,
    SUM(fp.Dana_Diajukan) AS Total_Dana_Diajukan,
    SUM(fp.Dana_Disetujui) AS Total_Dana_Setuju,
    AVG(fp.Lama_Review_Hari) AS Avg_Review_Days,
    SUM(CASE WHEN fp.Status_Proposal = 'Diterima' THEN 1 ELSE 0 END) AS Proposal_Diterima
FROM Fact_Proposal fp
JOIN Dim_Date d ON fp.DateKey_Pengajuan = d.DateKey
JOIN Dim_PusatRiset pr ON fp.PusatRisetKey_Afiliasi = pr.PusatRisetKey
JOIN Dim_Skema s ON fp.SkemaKey = s.SkemaKey
GROUP BY d.Tahun, d.Kuartal, d.NamaBulan, d.Bulan, pr.Nama_Pusat_Riset, s.Nama_Skema, s.Jenis_Skema, s.Sumber_Dana;
GO

-- 2. VIEW PENELITI (Produktivitas Dosen)
-- Digunakan untuk Halaman 3 Dashboard (Researcher Performance)
CREATE OR ALTER VIEW vw_Peneliti_Performance AS
SELECT
    p.NIDN,
    p.Nama_Peneliti,
    p.Jabatan_Fungsional,
    prod.Nama_Prodi,
    prod.Fakultas,
    COUNT(DISTINCT fp.ProposalKey) AS Jml_Proposal,
    SUM(fp.Dana_Disetujui) AS Total_Dana,
    COUNT(DISTINCT fa.PublikasiKey) AS Jml_Publikasi,
    SUM(fa.Jumlah_Sitasi) AS Total_Sitasi
FROM Dim_Peneliti p
JOIN Dim_Prodi prod ON p.ProdiKey_Afiliasi = prod.ProdiKey
LEFT JOIN Fact_Proposal fp ON p.PenelitiKey = fp.PenelitiKey_Ketua
LEFT JOIN Fact_Authorship fa ON p.PenelitiKey = fa.PenelitiKey
WHERE p.IsCurrent = 1
GROUP BY p.NIDN, p.Nama_Peneliti, p.Jabatan_Fungsional, prod.Nama_Prodi, prod.Fakultas;
GO
```

```sql
-- 3. VIEW PETA (GIS Sebaran KKN)
-- Digunakan untuk Halaman 2 Dashboard (Geographic Analysis)
CREATE OR ALTER VIEW vw_Abdimas_Map AS
SELECT
    l.Provinsi,
    l.Kabupaten,
    l.Kecamatan,
    l.Nama_Desa,
    d.Tahun,
    fk.Periode_KKN,
    COUNT(fk.MahasiswaKey) AS Jml_Mahasiswa,
    COUNT(DISTINCT fk.PenelitiKey_DPL) AS Jml_Dosen
FROM Fact_KKN fk
JOIN Dim_Lokasi l ON fk.LokasiKey = l.LokasiKey
JOIN Dim_Date d ON fk.DateKey_Mulai = d.DateKey
GROUP BY l.Provinsi, l.Kabupaten, l.Kecamatan, l.Nama_Desa, d.Tahun, fk.Periode_KKN;
GO

-- 4. VIEW SYSTEM LOGS (Visualisasi Baru: Tren Unduhan & Kata Kunci)
CREATE OR ALTER VIEW vw_Dataset_Analytics AS
SELECT
    ds.Nama_Dataset, ds.Kategori_Nama, ds.Format,
    d.NamaBulan, d.Bulan, d.Tahun,
    SUM(f.Total_Downloads) AS Total_Downloads,
    SUM(f.Total_Views) AS Total_Views
FROM Fact_Dataset_Statistik f
JOIN Dim_Dataset ds ON f.DatasetKey = ds.DatasetKey
JOIN Dim_Date d ON f.DateKey_Log = d.DateKey
GROUP BY ds.Nama_Dataset, ds.Kategori_Nama, ds.Format, d.NamaBulan, d.Bulan, d.Tahun;
GO

CREATE OR ALTER VIEW vw_Search_Analytics AS
SELECT
    k.Kata_Kunci, k.Kategori_Pencarian,
    SUM(f.Total_Pencarian) AS Total_Hits,
    SUM(f.Total_Pencarian_Nihil) AS Total_Nihil,
    AVG(f.Waktu_Respon_Ms) AS Avg_Response_Time
FROM Fact_Pencarian_Log f
JOIN Dim_KataKunci k ON f.KataKunciKey = k.KataKunciKey
GROUP BY k.Kata_Kunci, k.Kategori_Pencarian;
GO

PRINT '>>> FILE 10 SELESAI: Semua Analytical Views Berhasil Dibuat. <<<';
GO
```

```sql
-- ====================================================
-- 2. PEMBUATAN LOGIN DAN USER (DUMMY)
-- ====================================================

USE master;
GO
-- Hapus Login Lama di Server
IF EXISTS (SELECT * FROM sys.server_principals WHERE name = 'executive_user') DROP LOGIN executive_user;
IF EXISTS (SELECT * FROM sys.server_principals WHERE name = 'analyst_user') DROP LOGIN analyst_user;
IF EXISTS (SELECT * FROM sys.server_principals WHERE name = 'viewer_user') DROP LOGIN viewer_user;
GO

-- Buat Login Baru
CREATE LOGIN executive_user WITH PASSWORD = 'Executive@2025', CHECK_POLICY = OFF;
CREATE LOGIN analyst_user WITH PASSWORD = 'Analyst@2025', CHECK_POLICY = OFF;
CREATE LOGIN viewer_user WITH PASSWORD = 'Viewer@2025', CHECK_POLICY = OFF;
GO

USE DW_LPPM;
GO
-- Hapus User Lama di Database
IF DATABASE_PRINCIPAL_ID('executive_user') IS NOT NULL DROP USER executive_user;
IF DATABASE_PRINCIPAL_ID('analyst_user') IS NOT NULL DROP USER analyst_user;
IF DATABASE_PRINCIPAL_ID('viewer_user') IS NOT NULL DROP USER viewer_user;
GO

-- Mapping User Database ke Login Server
CREATE USER executive_user FOR LOGIN executive_user;
CREATE USER analyst_user FOR LOGIN analyst_user;
CREATE USER viewer_user FOR LOGIN viewer_user;
GO

-- Masukkan User ke dalam Role
ALTER ROLE db_executive ADD MEMBER executive_user;
ALTER ROLE db_analyst ADD MEMBER analyst_user;
ALTER ROLE db_viewer ADD MEMBER viewer_user;
GO
```

```sql
-- ====================================================
-- 1. PEMBUATAN ROLE DATABASE
-- ====================================================

-- Cleanup Member Role Lama (Jika Ada)
IF DATABASE_PRINCIPAL_ID('executive_user') IS NOT NULL AND DATABASE_PRINCIPAL_ID('db_executive') IS NOT NULL
    ALTER ROLE db_executive DROP MEMBER executive_user;
IF DATABASE_PRINCIPAL_ID('analyst_user') IS NOT NULL AND DATABASE_PRINCIPAL_ID('db_analyst') IS NOT NULL
    ALTER ROLE db_analyst DROP MEMBER analyst_user;
IF DATABASE_PRINCIPAL_ID('viewer_user') IS NOT NULL AND DATABASE_PRINCIPAL_ID('db_viewer') IS NOT NULL
    ALTER ROLE db_viewer DROP MEMBER viewer_user;
GO

-- Hapus Role Lama
IF DATABASE_PRINCIPAL_ID('db_executive') IS NOT NULL DROP ROLE db_executive;
IF DATABASE_PRINCIPAL_ID('db_analyst') IS NOT NULL DROP ROLE db_analyst;
IF DATABASE_PRINCIPAL_ID('db_viewer') IS NOT NULL DROP ROLE db_viewer;
GO

-- Buat Role Baru
CREATE ROLE db_executive;    -- Untuk Pimpinan (Rektor/Ketua LPPM)
CREATE ROLE db_analyst;      -- Untuk Tim Data Science
CREATE ROLE db_viewer;       -- Untuk Dosen/Tamu
GO

-- Grant Permissions (Hak Akses)
-- Executive: Bisa lihat semua data asli (Unmasked)
GRANT SELECT ON SCHEMA::dbo TO db_executive;
GRANT UNMASK TO db_executive;

-- Analyst: Bisa lihat data, buat view, dan lihat data asli
GRANT SELECT ON SCHEMA::dbo TO db_analyst;
GRANT CREATE VIEW TO db_analyst;
GRANT UNMASK TO db_analyst;
-- Akses penuh ke Staging
GRANT SELECT, INSERT, UPDATE, DELETE ON SCHEMA::stg TO db_analyst;

-- Viewer: Hanya bisa lihat data (terkena Masking)
GRANT SELECT ON SCHEMA::dbo TO db_viewer;
GO
```

```sql
-- ====================================================
-- 3. DYNAMIC DATA MASKING (Perlindungan Data Pribadi)
-- ====================================================

-- Masking NIDN di Tabel Dim_Peneliti
-- Contoh: 00123456 -> 00XXXX56
IF OBJECT_ID('dbo.Dim_Peneliti', 'U') IS NOT NULL
BEGIN
    ALTER TABLE dbo.Dim_Peneliti
    ALTER COLUMN NIDN ADD MASKED WITH (FUNCTION = 'partial(2,"XXXX",2)');
END
GO

-- Masking NIM di Tabel Dim_Mahasiswa
-- Contoh: 121450123 -> 121XXXX23
IF OBJECT_ID('dbo.Dim_Mahasiswa', 'U') IS NOT NULL
BEGIN
    ALTER TABLE dbo.Dim_Mahasiswa
    ALTER COLUMN NIM ADD MASKED WITH (FUNCTION = 'partial(3,"XXXX",2)');
END
GO
```

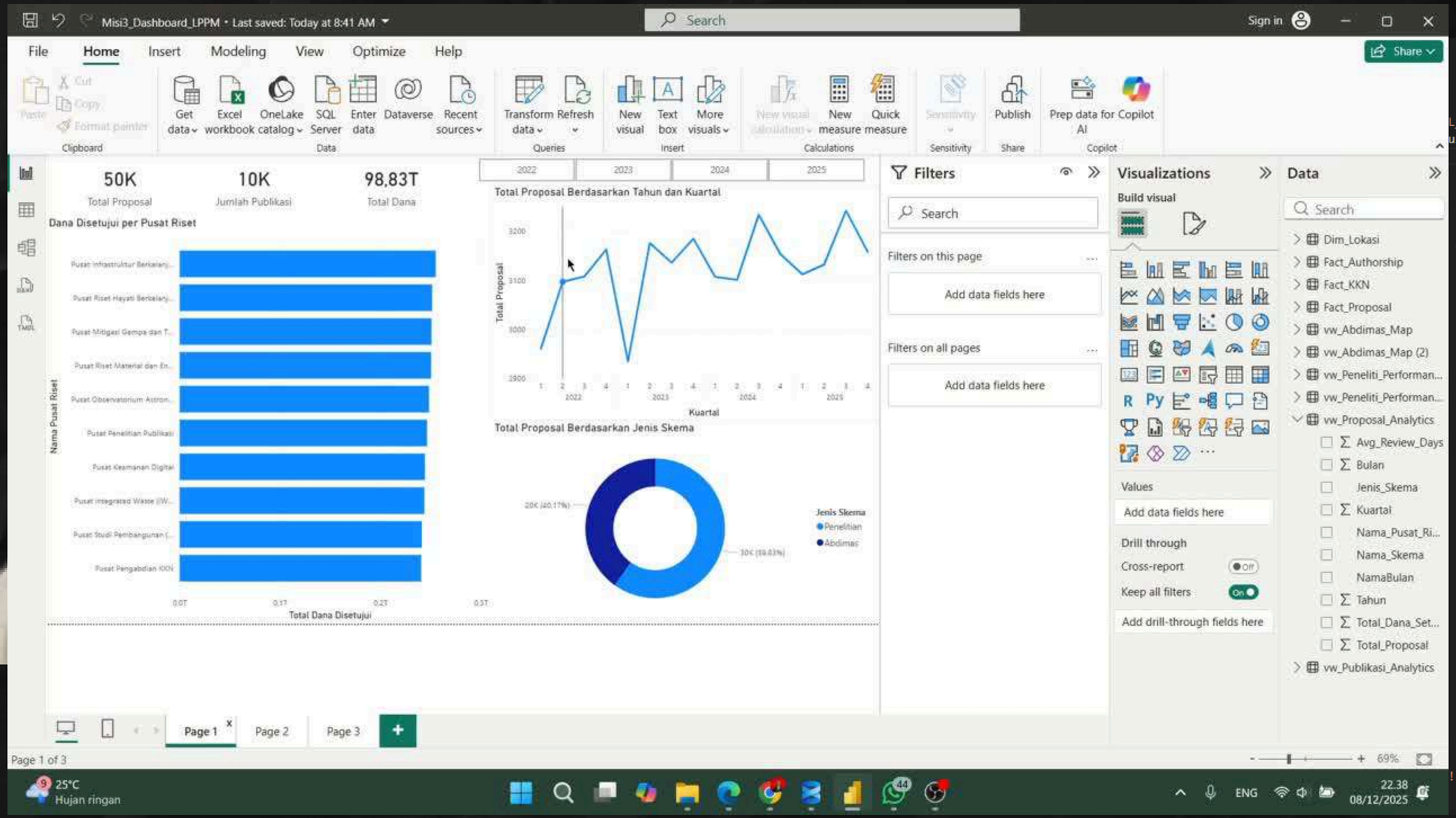
```sql
-- Buat Tabel Log Audit
IF OBJECT_ID('dbo.AuditLog', 'U') IS NOT NULL DROP TABLE dbo.AuditLog;
GO
CREATE TABLE dbo.AuditLog (
    AuditID INT IDENTITY(1,1) PRIMARY KEY,
    TableName NVARCHAR(128),
    Operation NVARCHAR(10), -- INSERT, UPDATE, DELETE
    RecordID BIGINT,
    OldValue NVARCHAR(MAX),
    NewValue NVARCHAR(MAX),
    ModifiedBy NVARCHAR(128) DEFAULT SUSER_SNAME(),
    ModifiedDate DATETIME DEFAULT GETDATE()
);
GO
-- Trigger Audit pada Tabel Fact_Proposal
-- Setiap ada perubahan Proposal, akan dicatat siapa pelakunya
CREATE OR ALTER TRIGGER trg_Audit_Fact_Proposal
ON dbo.Fact_Proposal
AFTER INSERT, UPDATE, DELETE
AS
BEGIN
    SET NOCOUNT ON;
    DECLARE @Operation NVARCHAR(10);
    -- Tentukan Jenis Operasi
    IF EXISTS (SELECT * FROM inserted) AND EXISTS (SELECT * FROM deleted) SET @Operation = 'UPDATE';
    ELSE IF EXISTS (SELECT * FROM inserted) SET @Operation = 'INSERT';
    ELSE SET @Operation = 'DELETE';
    -- Catat INSERT
    IF @Operation = 'INSERT'
        INSERT INTO dbo.AuditLog (TableName, Operation, RecordID, NewValue)
        SELECT 'Fact_Proposal', 'INSERT', ProposalKey,
        CONCAT('Dana:', Dana_Diajukan, ', Status:', Status_Proposal) FROM inserted;
    -- Catat UPDATE
    IF @Operation = 'UPDATE'
        INSERT INTO dbo.AuditLog (TableName, Operation, RecordID, OldValue, NewValue)
        SELECT 'Fact_Proposal', 'UPDATE', i.ProposalKey,
        CONCAT('Dana:', d.Dana_Diajukan, ', Status:', d.Status_Proposal),
        CONCAT('Dana:', i.Dana_Diajukan, ', Status:', i.Status_Proposal)
        FROM inserted i JOIN deleted d ON i.ProposalKey = d.ProposalKey;
    -- Catat DELETE
    IF @Operation = 'DELETE'
        INSERT INTO dbo.AuditLog (TableName, Operation, RecordID, OldValue)
        SELECT 'Fact_Proposal', 'DELETE', ProposalKey,
        CONCAT('Dana:', Dana_Diajukan, ', Status:', Status_Proposal) FROM deleted;
END;
GO
PRINT '>>> FILE 11 SELESAI: Konfigurasi Keamanan Berhasil Diterapkan. <<<';
GO
```

```sql
-- C. TRANSACTION LOG BACKUP (Per 6 Jam)
CREATE OR ALTER PROCEDURE dbo.sp_LogBackup_LPPM
AS
BEGIN
    SET NOCOUNT ON;
    DECLARE @BackupPath NVARCHAR(500) = 'C:\Backup\';
    DECLARE @FileName NVARCHAR(500);
    DECLARE @DatabaseName NVARCHAR(100) = 'DW_LPPM';
    DECLARE @CurrentDate NVARCHAR(50);

    SET @CurrentDate = CONVERT(NVARCHAR(50), GETDATE(), 112) + '_' + REPLACE(CONVERT(NVARCHAR(50), GETDATE(), 108), ':', '');
    SET @FileName = @BackupPath + @DatabaseName + '_Log_' + @CurrentDate + '.trn';

    BACKUP LOG [DW_LPPM]
    TO DISK = @FileName
    WITH INIT, NAME = 'DW_LPPM Log Backup', COMPRESSION, STATS = 10;

    PRINT 'Transaction Log Backup sukses disimpan di: ' + @FileName;
END;
GO


-- D. CLEANUP OLD BACKUPS (Maintenance - Hapus History Lama)
CREATE OR ALTER PROCEDURE dbo.sp_CleanupOldBackups_LPPM
    @RetentionDays INT = 30
AS
BEGIN
    SET NOCOUNT ON;
    DECLARE @DeleteDate DATETIME = DATEADD(DAY, -@RetentionDays, GETDATE());

    -- Hapus history backup dari msdb agar tidak membengkak
    EXEC msdb.dbo.sp_delete_backuphistory @oldest_date = @DeleteDate;

    PRINT 'Cleanup History Backup (lebih dari ' + CAST(@RetentionDays AS VARCHAR) + ' hari) sukses.';
END;
GO
```

```sql
-- B. DIFFERENTIAL BACKUP (Harian)
CREATE OR ALTER PROCEDURE dbo.sp_DifferentialBackup_LPPM
AS
BEGIN
    SET NOCOUNT ON;
    DECLARE @BackupPath NVARCHAR(500) = 'C:\Backup\';
    DECLARE @FileName NVARCHAR(500);
    DECLARE @DatabaseName NVARCHAR(100) = 'DW_LPPM';
    DECLARE @CurrentDate NVARCHAR(50);

    SET @CurrentDate = CONVERT(NVARCHAR(50), GETDATE(), 112) + '_' + REPLACE(CONVERT(NVARCHAR(50), GETDATE(), 108), ':', '');
    SET @FileName = @BackupPath + @DatabaseName + '_Diff_' + @CurrentDate + '.bak';

    BACKUP DATABASE [DW_LPPM]
    TO DISK = @FileName
    WITH DIFFERENTIAL, INIT, NAME = 'DW_LPPM Diff Backup', COMPRESSION, STATS = 10;

    PRINT 'Differential Backup sukses disimpan di: ' + @FileName;
END;
GO
```

```sql
-- ============================================================
-- 3. SQL AGENT JOBS (PENJADWALAN OTOMATIS)
-- ============================================================
USE msdb;
GO

-- JOB 1: Full Backup (Mingguan - Setiap Minggu jam 02:00 Pagi)
IF EXISTS (SELECT job_id FROM msdb.dbo.sysjobs WHERE name = 'LPPM_Backup_Full_Weekly')
    EXEC sp_delete_job @job_name = 'LPPM_Backup_Full_Weekly', @delete_unused_schedule=1;
GO
EXEC sp_add_job @job_name = 'LPPM_Backup_Full_Weekly', @enabled = 1;
EXEC sp_add_jobstep @job_name = 'LPPM_Backup_Full_Weekly', @step_name = 'Exec Full Backup',
    @subsystem = 'TSQL', @command = 'EXEC master.dbo.sp_FullBackup_LPPM;', @database_name = 'master';
EXEC sp_add_schedule @schedule_name = 'WeeklySunday', @freq_type = 8, @freq_interval = 1, @freq_recurrence_factor = 1, @active_start_t
EXEC sp_attach_schedule @job_name = 'LPPM_Backup_Full_Weekly', @schedule_name = 'WeeklySunday';
EXEC sp_add_jobserver @job_name = 'LPPM_Backup_Full_Weekly';
GO

-- JOB 2: Diff Backup (Harian - Senin s.d Sabtu jam 02:00 Pagi)
IF EXISTS (SELECT job_id FROM msdb.dbo.sysjobs WHERE name = 'LPPM_Backup_Diff_Daily')
    EXEC sp_delete_job @job_name = 'LPPM_Backup_Diff_Daily', @delete_unused_schedule=1;
GO
EXEC sp_add_job @job_name = 'LPPM_Backup_Diff_Daily', @enabled = 1;
EXEC sp_add_jobstep @job_name = 'LPPM_Backup_Diff_Daily', @step_name = 'Exec Diff Backup',
    @subsystem = 'TSQL', @command = 'EXEC master.dbo.sp_DifferentialBackup_LPPM;', @database_name = 'master';
EXEC sp_add_schedule @schedule_name = 'DailyNoSunday', @freq_type = 8, @freq_interval = 126, @freq_recurrence_factor = 1, @active_star
EXEC sp_attach_schedule @job_name = 'LPPM_Backup_Diff_Daily', @schedule_name = 'DailyNoSunday';
EXEC sp_add_jobserver @job_name = 'LPPM_Backup_Diff_Daily';
GO

-- JOB 3: Log Backup (Setiap 6 Jam Sekali)
IF EXISTS (SELECT job_id FROM msdb.dbo.sysjobs WHERE name = 'LPPM_Backup_Log_6Hourly')
    EXEC sp_delete_job @job_name = 'LPPM_Backup_Log_6Hourly', @delete_unused_schedule=1;
GO
EXEC sp_add_job @job_name = 'LPPM_Backup_Log_6Hourly', @enabled = 1;
EXEC sp_add_jobstep @job_name = 'LPPM_Backup_Log_6Hourly', @step_name = 'Exec Log Backup',
    @subsystem = 'TSQL', @command = 'EXEC master.dbo.sp_LogBackup_LPPM;', @database_name = 'master';
EXEC sp_add_schedule @schedule_name = 'Every6Hours', @freq_type = 4, @freq_interval = 1, @freq_subday_type = 8, @freq_subday_interval
EXEC sp_attach_schedule @job_name = 'LPPM_Backup_Log_6Hourly', @schedule_name = 'Every6Hours';
EXEC sp_add_jobserver @job_name = 'LPPM_Backup_Log_6Hourly';
GO

PRINT '>>> FILE 12 SELESAI: Konfigurasi Backup Berhasil Diterapkan. <<<';
```

```sql
-- A. FULL BACKUP (Mingguan)
CREATE OR ALTER PROCEDURE dbo.sp_FullBackup_LPPM
AS
BEGIN
    SET NOCOUNT ON;
    -- PENTING: Pastikan folder ini sudah dibuat manual di C:\Backup\
    DECLARE @BackupPath NVARCHAR(500) = 'C:\Backup\';
    DECLARE @FileName NVARCHAR(500);
    DECLARE @DatabaseName NVARCHAR(100) = 'DW_LPPM';
    DECLARE @CurrentDate NVARCHAR(50);

    -- Format nama file: DW_LPPM_Full_YYYYMMDD_HHMMSS.bak
    SET @CurrentDate = CONVERT(NVARCHAR(50), GETDATE(), 112) + '_' + REPLACE(CONVERT(NVARCHAR(50), GETDATE(), 108), ':', '');
    SET @FileName = @BackupPath + @DatabaseName + '_Full_' + @CurrentDate + '.bak';

    BACKUP DATABASE [DW_LPPM]
    TO DISK = @FileName
    WITH INIT, NAME = 'DW_LPPM Full Backup', COMPRESSION, STATS = 10;

    PRINT 'Full Backup sukses disimpan di: ' + @FileName;
END;
GO
```


Misi3_Dashboard_LPPM • Last saved: Today at 8:41 AM
Search
Sign in
File Home Insert Modeling View Optimize Help
Share
Get data
Excel workbook
OneLake catalog
SQL Server
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Recent sources
Transform data
Refresh
New visual
Text box
More visuals
New measure
Quick measure
Publish
Prep data for AI
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Sensitivity
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Jumlah Publikasi
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Total Dana
Dana Disetujui per Pusat Riset
Nama Pusat Riset
Total Dana Disetujui
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2025
Total Proposal Berdasarkan Tahun dan Kuartal
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Kuartal
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Jenis Skema
Penelitian
Abdimas
Filters
Search
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Visualizations
Build visual
Values
Add data fields here
Drill through
Cross-report
Off
Keep all filters
On
Add drill-through fields here
Data
Search
Dim_Lokasi
Fact_Authorship
Fact_KKN
Fact_Proposal
vw_Abdimas_Map
vw_Abdimas_Map (2)
vw_Peneliti_Performan...
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vw_Proposal_Analytics
Avg_Review_Days
Bulan
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Total_Proposal
vw_Publikasi_Analytics
Page 1
Page 2
Page 3
Page 1 of 3
69%
25°C
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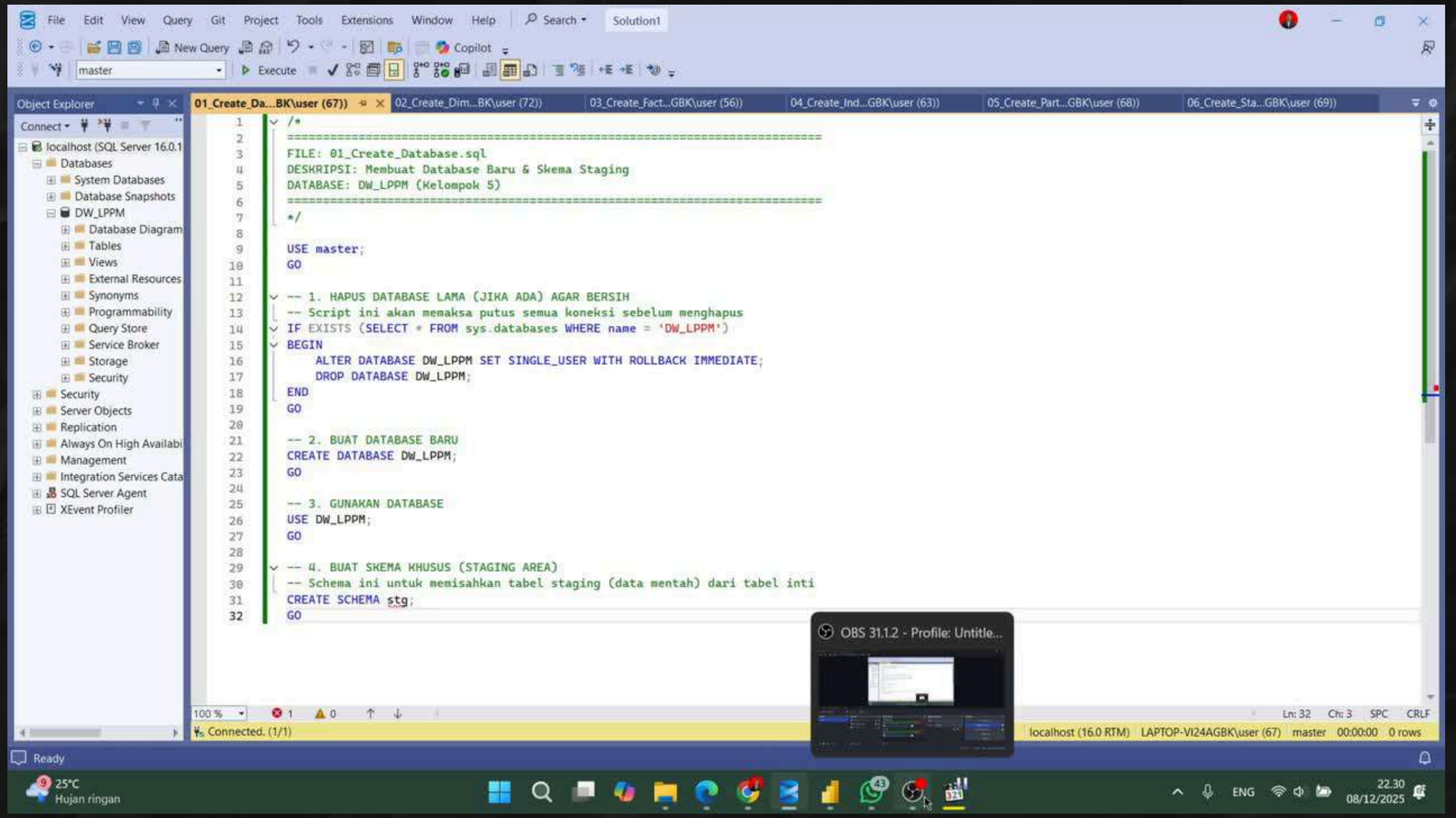
File Edit View Query Git Project Tools Extensions Window Help
Search
Solution1
New Query
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master
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Object Explorer
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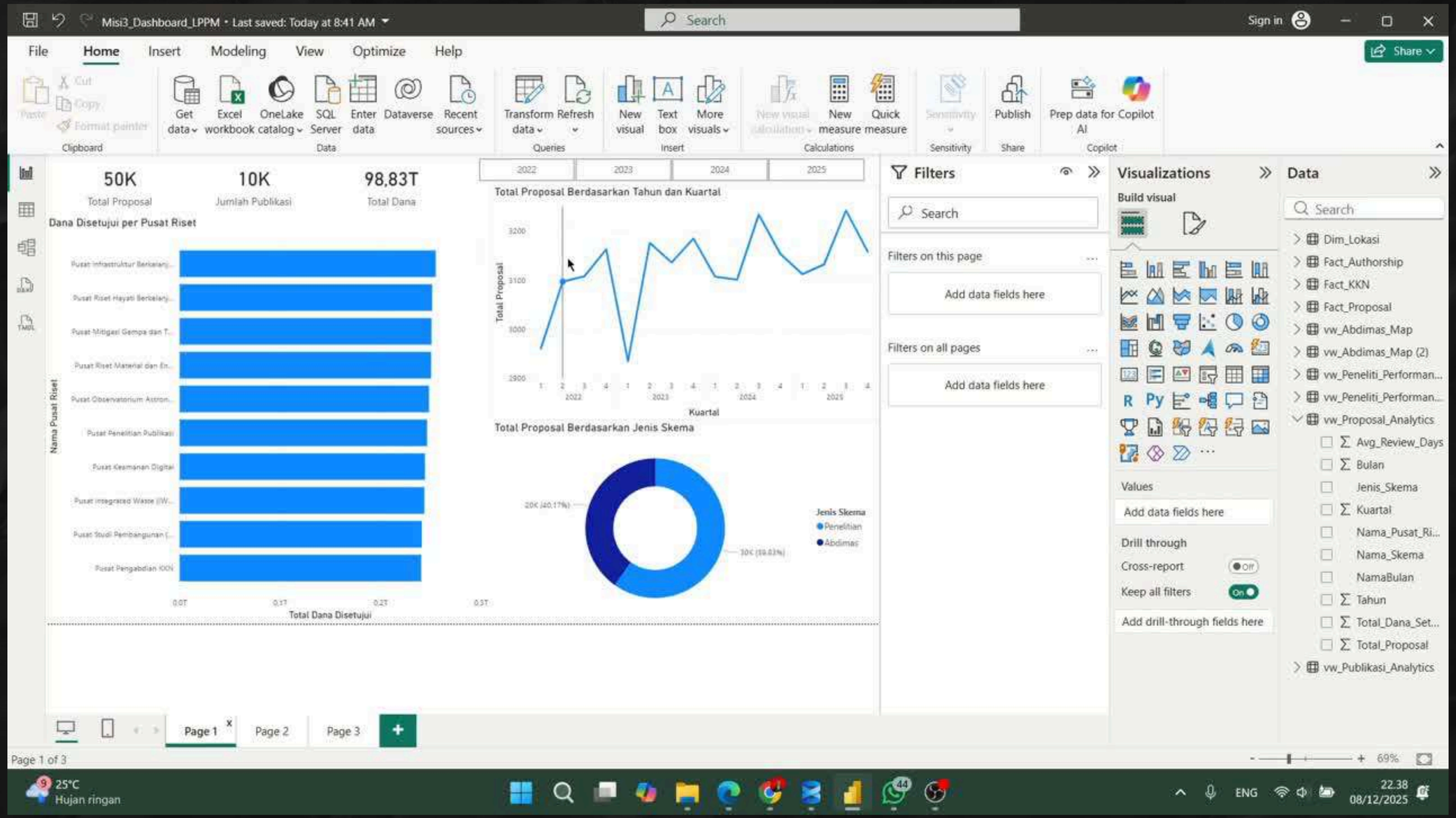
localhost (SQL Server 16.0.1
Databases
System Databases
Database Snapshots
DW_LPPM
Database Diagram
Tables
Views
External Resources
Synonyms
Programmability
Query Store
Service Broker
Storage
Security
Security
Server Objects
Replication
Always On High Availabi
Management
Integration Services Cata
SQL Server Agent
XEvent Profiler
01_Create_Da...BK\user (67))
02_Create_Dim...BK\user (72))
03_Create_Fact...GBK\user (56))
04_Create_Ind...GBK\user (63))
05_Create_Part...GBK\user (68))
06_Create_Sta...GBK\user (69))
/*
FILE: 01_Create_Database.sql
DESKRIPSI: Membuat Database Baru & Skema Staging
DATABASE: DW_LPPM (Kelompok 5)
*/
USE master;
GO
-- 1. HAPUS DATABASE LAMA (JIKA ADA) AGAR BERSIH
-- Script ini akan memaksa putus semua koneksi sebelum menghapus
IF EXISTS (SELECT * FROM sys.databases WHERE name = 'DW_LPPM')
BEGIN
ALTER DATABASE DW_LPPM SET SINGLE_USER WITH ROLLBACK IMMEDIATE;
DROP DATABASE DW_LPPM;
END
GO
-- 2. BUAT DATABASE BARU
CREATE DATABASE DW_LPPM;
GO
-- 3. GUNAKAN DATABASE
USE DW_LPPM;
GO
-- 4. BUAT SKEMA KHUSUS (STAGING AREA)
-- Schema ini untuk memisahkan tabel staging (data mentah) dari tabel inti
CREATE SCHEMA stg;
GO
OBS 31.1.2 - Profile: Untitle...
100 %
Ln: 32 Ch: 3 SPC CRLF
Connected. (1/1)
localhost (16.0 RTM) LAPTOP-VI24AGBK\user (67) master 00:00:00 0 rows
Ready
25°C
Hujan ringan
ENG
22.30
08/12/2025


Misi3_Dashboard_LPPM • Last saved: Today at 8:41 AM
Search
Sign in
File Home Insert Modeling View Optimize Help
Share
Cut Copy Format painter
Get data Excel workbook OneLake catalog SQL Server Enter data Dataverse Recent sources
Data
Transform data Refresh
Queries
New visual Text box More visuals
Insert
New visual calculation New measure Quick measure
Calculations
Sensitivity
Publish
Share
Prep data for AI Copilot
Copilot
50K
Total Proposal
10K
Jumlah Publikasi
98,83T
Total Dana
Dana Disetujui per Pusat Riset
Nama Pusat Riset
Total Dana Disetujui
2022 2023 2024 2025
Total Proposal Berdasarkan Tahun dan Kuartal
Total Proposal
Kuartal
Total Proposal Berdasarkan Jenis Skema
Jenis Skema
Penelitian
Abdimas
Filters
Search
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Visualizations
Build visual
Values
Add data fields here
Drill through
Cross-report
Keep all filters
Add drill-through fields here
Data
Search
Dim_Lokasi
Fact_Authorship
Fact_KKN
Fact_Proposal
vw_Abdimas_Map
vw_Abdimas_Map (2)
vw_Peneliti_Performan...
vw_Peneliti_Performan...
vw_Proposal_Analytics
Avg_Review_Days
Bulan
Jenis_Skema
Kuartal
Nama_Pusat_Ri...
Nama_Skema
NamaBulan
Tahun
Total_Dana_Set...
Total_Proposal
vw_Publikasi_Analytics
Page 1
Page 2
Page 3
Page 1 of 3
69%
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THANK YOU