

# MBD Video

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📅 Due Date	@Jul 03, 2021 12:00 AM
▼ Mata Kuliah	MBD
▼ Status	In progress

## KAMIS 14.00 WIB RECORDING

Bagian:

1. Presentasikan bagaimana anda bisa melakukan ETL dengan kode kode SQL, gabungkan dengan prosedur, dan praktekan bahwa ketika procedure dijalankan, initial ETL bisa dilakukan. **Salput**
  - Create Table → WH.sql
  - Procedure → procedure.sql
2. Jelaskan Kode SQL anda. **Faiq**
  - Jelaskan Relation Mapping **Faiq**
    - Insert-insertnya → wh-insert.sql
3. Setelah Datawarehouse jadi, Jelaskan untuk analisis apa saja, datawarehouse akan dipakai, querikan. **Kamila**
  - 3-a. Star Schema (untuk analisis 1 kita memerlukan dimensi blablabla)
  - 3-b. query select buat analisis  
analysis.sql
4. Lakukan analisis performa, sesuai dengan analisis/query yang dibutuhkan di nomor 3, dan optimalkan datawarehouse anda dengan index (berbagai macam jenis index spt, singular, concatenated, partial), trigger, function, procedure. Jelaskan analisis performa yang anda lakukan dan jelaskan solusinya. **Rasyad**  
index.sql, procedure-with-function.sql
5. Video (berupa link), doc.

## Analisis Apa?

1. siapa pegawai yang paling banyak kontribusinya di bulan februari?

```
select FirstName, LastName, SUM(TotalWork) AS TotalKontribusi from WH.FactTable F
join WH.Employee E on E.EmployeeKey = F.EmployeeKey
join WH.Time T on T.TimeKey = F.TimeKey
WHERE MonthNumber = 2
GROUP BY E.EmployeeKey, FirstName, LastName
ORDER BY TotalKontribusi DESC
```

2. pada bulan maret 2014, karyawan dengan umur berapakah yang memiliki kontribusi tertinggi?

```
select
    (CONVERT(int,CONVERT(char(8), '20150331', 112))-CONVERT(char(8),BirthDate,112))/10
    000 AS Umur,
    SUM(TotalWork) AS TotalKontribusi from WH.FactTable F
join WH.Employee E on E.EmployeeKey = F.EmployeeKey
join WH.Time T on T.TimeKey = F.TimeKey
WHERE MonthNumber = 3 AND Year = 2014
GROUP BY BirthDate
ORDER BY TotalKontribusi DESC
```

3. pada tahun 2014, kontribusi rata-rata terbanyak diperoleh oleh karyawan dengan status pernikahan apa?

```
select MaritalStatus, AVG(TotalWork) AS RataRataKontribusi from WH.FactTable F
join WH.Employee E on E.EmployeeKey = F.EmployeeKey
join WH.Time T on T.TimeKey = F.TimeKey
join WH.Marital M on M.MaritalKey = E.MaritalKey
WHERE Year = 2014
GROUP BY MaritalStatus
ORDER BY RataRataKontribusi DESC
```

4. siapa pegawai dan dari departemen apa yang paling banyak kontribusinya?

```
select FirstName, LastName, D.Name as DepartmentName, SUM(TotalWork) AS TotalKontribusi from WH.FactTable F
join WH.Employee E on E.EmployeeKey = F.EmployeeKey
join WH.Department D on D.DepartmentKey = E.DepartmentKey
GROUP BY E.EmployeeKey, FirstName, LastName, D.Name
ORDER BY TotalKontribusi DESC
```

5. hubungan antara gaji yang diterima dengan kontribusi?

```
select PayRate, SUM(TotalWork) AS TotalKontribusi from WH.FactTable F
join WH.Employee E on E.EmployeeKey = F.EmployeeKey
GROUP BY PayRate
ORDER BY TotalKontribusi DESC
```

6. hubungan antara gender dengan rata-rata kontribusi?

```
select Gender, AVG(TotalWork) AS RataRataKontribusi from WH.FactTable F
join WH.Employee E on E.EmployeeKey = F.EmployeeKey
join WH.Gender G on G.GenderKey = E.GenderKey
GROUP BY Gender
ORDER BY RataRataKontribusi DESC
```

7. job title yang paling sedikit ngambil cuti dan izin sakit?

```
select T.JobTitle, AVG(VacationHours + SickLeaveHours) AS JatahCuti from WH.Employee E
join WH.Title T on T.TitleKey = E.TitleKey
group by JobTitle
ORDER BY JatahCuti DESC
```

8. departemen yang paling banyak shift malamnya?

```
select D.Name, COUNT( E.ShiftKey ) as JumlahShiftMalam from WH.Employee E
join WH.Department D on D.DepartmentKey = E.DepartmentKey
join WH.Shift S on S.ShiftKey = E.ShiftKey
WHERE ShiftName = 'Night'
group by D.Name
order by JumlahShiftMalam DESC
```

9. hubungan antara status pernikahan dengan rata-rata gaji?

```
select MaritalStatus, AVG(PayRate) as RataRataGaji from WH.Employee E
join WH.Marital M on M.MaritalKey = E.MaritalKey
group by MaritalStatus
order by RataRataGaji DESC
```