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Mata Kuliah : Basis Data

1. Nama database yaitu

```
CREATE DATABASE db_tokokaka;  
-- Execute  
DEFAULT CHARACTER SET = 'utf8mb4';
```

2. Tabel store_information

```
-- Execute  
CREATE TABLE Store_Information(  
    Store_Name VARCHAR(30),  
    Sales INT,  
    Txn_Date VARCHAR(30)  
);  
  
-- Execute  
INSERT INTO Store_Information  
VALUES ('Los Angeles', 1500, 'Jan-05-1999'),  
('San Diego', 250, 'Jan-07-1999'),  
('Los Angeles', 300, 'Jan-08-1999'),  
('Boston', 700, 'Jan-08-1999');  
  
-- Execute  
SELECT * FROM Store_Information;
```

Store_Information X

SELECT * FROM Store_Information

Cost: 61ms < 1 > Total 4

		Store_Name varchar(30)	Sales int	Txn_Date varchar(30)
	1	Los Angeles	1500	Jan-05-1999
	2	San Diego	250	Jan-07-1999
	3	Los Angeles	300	Jan-08-1999
	4	Boston	700	Jan-08-1999

3. Tabel geography

Execute

```
CREATE TABLE Geography(
    Region_Name VARCHAR(15),
    Store_Name VARCHAR(15)
);
```

Execute

```
INSERT INTO Geography
VALUES ('East', 'Boston'),
      ('East', 'New York'),
      ('West', 'Los Angeles'),
      ('West', 'San Diego');
```

Execute

```
SELECT * FROM Geography;
```

Cost: 343ms < 1 > Total 4

		Region_Name varchar(15)	Store_Name varchar(15)
	1	East	Boston
	2	East	New York
	3	West	Los Angeles
	4	West	San Diego

4. SQL Join

a. Query Multi Table

```
SELECT A1.Region_Name REGION,
       SUM(A2.Sales) SALES
FROM Geography A1, Store_Information A2
WHERE A1.Store_Name = A2.Store_Name
GROUP BY A1.Region_Name
```

Cost: 120ms < 1 > Total 2

		REGION varchar	SALES newdecimal
	1	East	700
	2	West	2050

b. SQL Join

```

SELECT A1.Region_Name REGION,
SUM(A2.Sales) SALES
FROM Geography A1
JOIN Store_Information A2
ON A1.Store_Name = A2.Store_Name
GROUP BY A1.Region_Name

```

Cost: 100ms < 1 > Total 2

		REGION varchar	SALES newdecimal
	1	East	700
	2	West	2050

c. Inner Join

```

SELECT A1.Store_Name STORE,
SUM(A2.Sales) SALES
FROM Geography A1
INNER JOIN Store_Information A2
ON A1.Store_Name = A2.Store_Name
GROUP BY A1.Store_Name

```

Cost: 65ms < 1 > Total 3

		STORE varchar	SALES newdecimal
	1	Boston	700
	2	Los Angeles	1800
	3	San Diego	250

5. Outer Join

a. Left Outer Join

```

SELECT A1.Store_Name STORE,
SUM(A2.Sales) SALES
FROM Geography A1
LEFT OUTER JOIN Store_Information A2
ON A1.Store_Name = A2.Store_Name
GROUP BY A1.Store_Name

```

Cost: 83ms < 1 > Total 4

		STORE varchar	SALES newdecimal
	1	Boston	700
	2	Los Angeles	1800
	3	New York	(NULL)
	4	San Diego	250