

## **Pertemuan 9 - 14 SQL**

### **DDL**

Operasi DDL

- Create
- Drop
- Alter

### **DML**

Constraint model data relasional

1. Domain constraint
2. Key constraint
3. Entity integrity constraint
4. Referential integrity constraint

Operasi **insert, delete, modify**

Operasi **select**

Kondisi 1 dan kondisi yg lain dihubungkan dg operator Boolean spt and, or, not and, not or, dst.

Fungsi aggregate ada 5 yaitu:

1. Sum()
2. Avg()
3. Max()
4. Min()
5. Count()

Nomor 1 - 4 → kolom, nomor 5 → baris, record

**Table 7.2** Summary of SQL Syntax

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```
CREATE TABLE <table name> ( <column name> <column type> [ <attribute constraint> ]
                             { , <column name> <column type> [ <attribute constraint> ] }
                             [ <table constraint> { , <table constraint> } ] )
```

---

```
DROP TABLE <table name>
ALTER TABLE <table name> ADD <column name> <column type>
```

---

```
SELECT [ DISTINCT ] <attribute list>
FROM ( <table name> { <alias> } | <joined table> ) { , ( <table name> { <alias> } | <joined table> ) }
[ WHERE <condition> ]
[ GROUP BY <grouping attributes> [ HAVING <group selection condition> ] ]
[ ORDER BY <column name> [ <order> ] { , <column name> [ <order> ] } ]
```

---

```
<attribute list> ::= ( * | ( <column name> | <function> ( ( [ DISTINCT ] <column name> | * ) ) )
                    { , ( <column name> | <function> ( ( [ DISTINCT ] <column name> | * ) ) ) } )
```

---

```
<grouping attributes> ::= <column name> { , <column name> }
```

---

```
<order> ::= ( ASC | DESC )
```

---

```
INSERT INTO <table name> [ ( <column name> { , <column name> } ) ]
( VALUES ( <constant value> , { <constant value> } ) { , ( <constant value> { , <constant value> } ) }
| <select statement> )
```

---

```
DELETE FROM <table name>
[ WHERE <selection condition> ]
```

---

```
UPDATE <table name>
SET <column name> = <value expression> { , <column name> = <value expression> }
[ WHERE <selection condition> ]
```

---

```
CREATE [ UNIQUE ] INDEX <index name>
ON <table name> ( <column name> [ <order> ] { , <column name> [ <order> ] } )
[ CLUSTER ]
```

---

```
DROP INDEX <index name>
```

---

```
CREATE VIEW <view name> [ ( <column name> { , <column name> } ) ]
AS <select statement>
```

---

```
DROP VIEW <view name>
```

NOTE: The commands for creating and dropping indexes are not part of standard SQL.

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