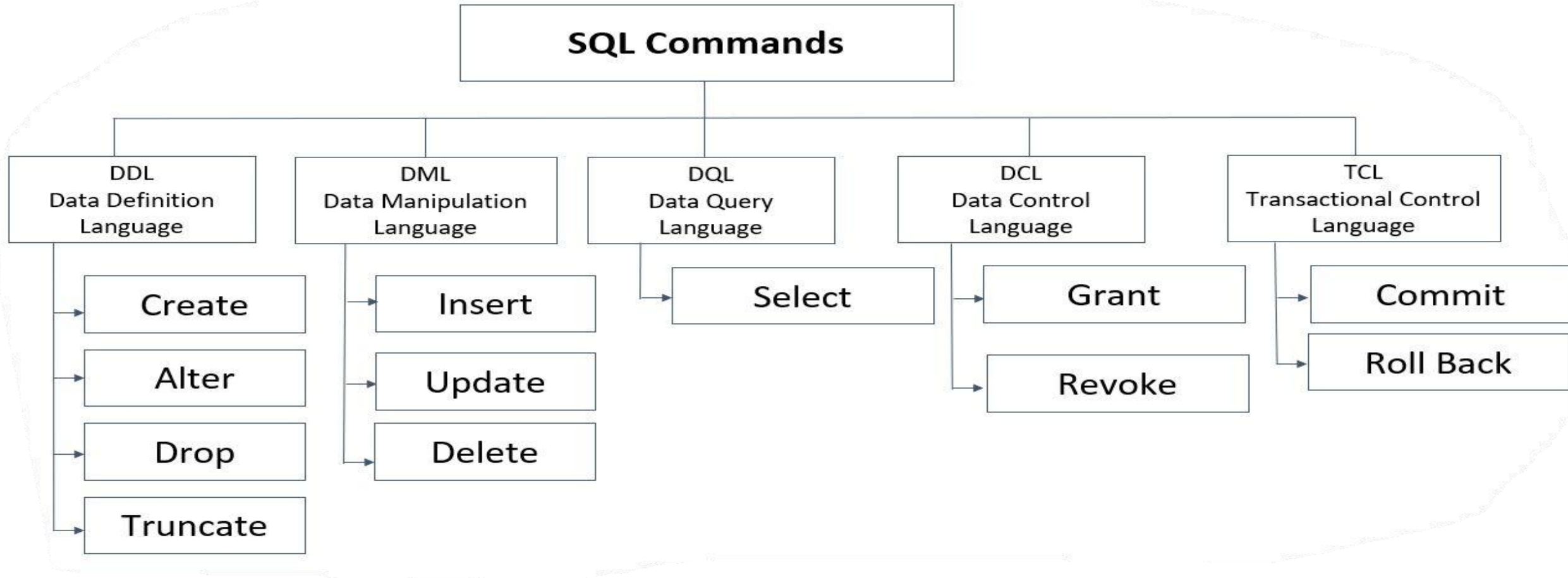


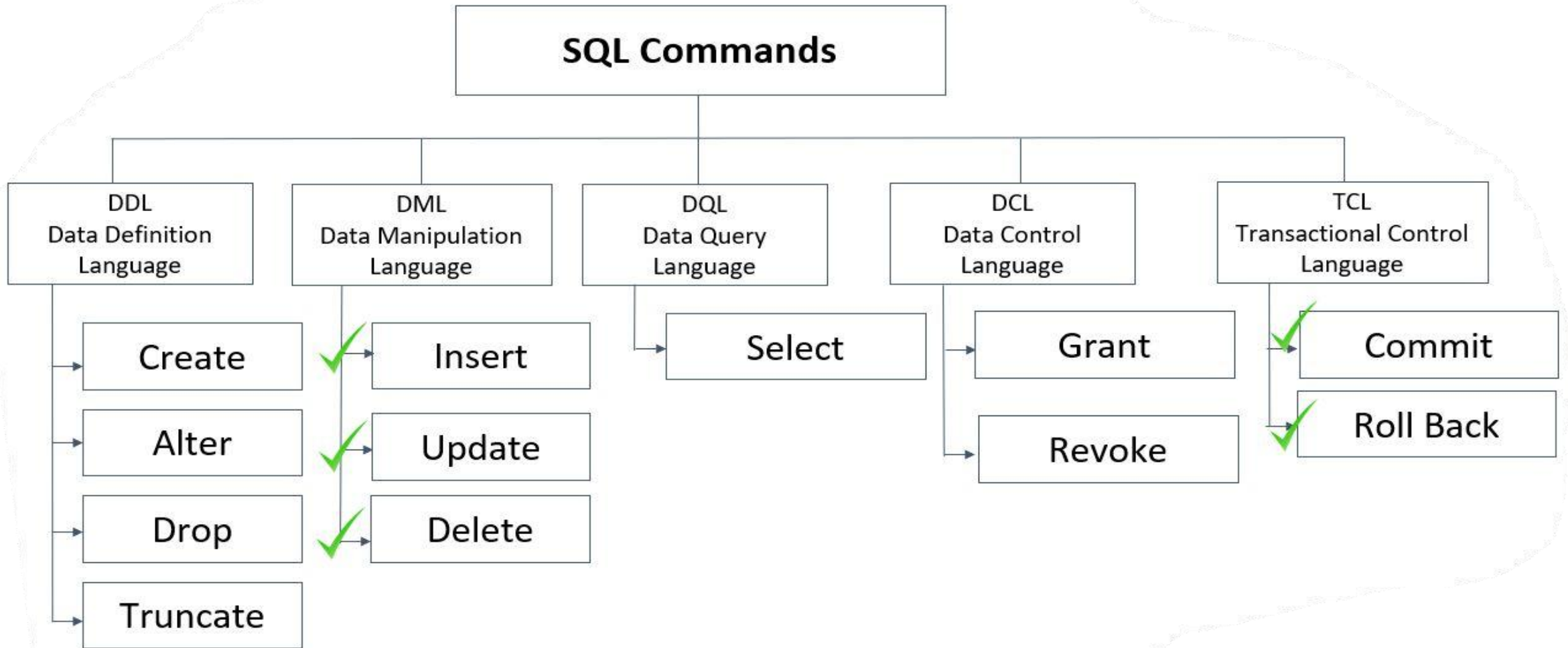


# Data Manipulation Language (DML)

# Types of SQL Commands



# Types of SQL Commands



# Data Manipulation Language (DML)

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- The typical commands available in DML are:
  - INSERT
  - UPDATE
  - DELETE
  - SELECT



# INSERT

# SQL INSERT - Syntax

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- The INSERT INTO statement helps to insert new records in a table
- We can write the INSERT INTO statement in two ways
- First way specifies both the column names and the values which are required to be inserted

Syntax:

```
INSERT INTO table_name (column1, column2, column3, ...)  
VALUES (value1, value2, value3, ...);
```

# SQL INSERT - Syntax

---

- Second way to insert values can be in the following manner where we do not use the column names:

Syntax:

```
INSERT INTO table_name VALUES (value1, value2, value3,...);
```

- Order values needs to be in the same order as the columns in table.

# SQL INSERT - Example

---

- Here we insert values into the customers table created earlier
- The INSERT statement inserts new records in a table

```
INSERT INTO customers (CustomerId,first_name,last_name,country)
VALUES
(1,'Mike', 'Christensen', 'USA'),
(2, 'Andy', 'Hollands', 'Australia'),
(3, 'Ravi', 'Vedantam', 'India');
```



# INSERT - Example

---

- Now, the “customer” table would be:

CustomerId	First_name	Last_name	Country
1	Mike	Christensen	USA
2	Andy	Hollands	Australia
3	Ravi	Vedantam	India



# UPDATE

# SQL UPDATE - Syntax

---

- The UPDATE statement modifies the records exist in a table

Syntax:

```
UPDATE table_name  
SET column1 = value1, column2 = value2, ...  
WHERE condition;
```



*We need to be very careful while updating the records in a table, You can notice the WHERE clause in the UPDATE statement. This clause specifies that which records to be updated. All records in the table will be updates if we omit the WHERE clause.*

# SQL UPDATE - Example

---

- Here we are updating the first row of the customers table
- The first\_name and the last\_name will be updated to John, Kent from the country 'USA'

```
UPDATE customers  
SET first_name = 'John', last_name= 'Kent'  
WHERE country = 'USA';
```

# UPDATE - Example

---

- Now, the “customer” table would be:

CustomerId	First_name	Last_name	Country
1	John	Kent	USA
2	Andy	Hollands	Australia
3	Ravi	Vedantam	India



# DELETE

# SQL DELETE - Syntax

---

- The DELETE statement deletes existing records in a table

Syntax:

```
DELETE FROM table_name WHERE condition;
```





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*We should be very careful while deleting the records in a table. You can notice the WHERE clause in the DELETE statement. . This clause specifies that which records to be deleted. All records in the table will be deleted if we omit the WHERE clause.*

# SQL DELETE - Example

---

- We are deleting the first row where, first name is John

```
DELETE FROM customers WHERE first_name='John';
```

- Now, the “customer” table would be:

CustomerId	First_name	Last_name	country
2	Andy	Hollands	Australia
3	Ravi	Vedantam	India



# Thank You