# DinoDB Command Documentation

## Introduction

DinoDB is a powerful database management system designed to manage structured data effectively. This documentation provides an in-depth guide to the available commands in DinoDB, including their purpose, syntax, and usage examples.

## Commands and Their Usage

### ALTER

\*\*Purpose:\*\* Modifies the structure of an existing table by adding or removing columns.

\*\*Syntax:\*\* ALTER TABLE <table\_name> ADD <column\_name> <type>;

\*\*Example:\*\* ALTER TABLE users ADD age INT;

### CREATE

\*\*Purpose:\*\* Creates a new database, table, or user.

\*\*Syntax:\*\* CREATE DATABASE <database\_name>; or CREATE TABLE <table\_name> (<columns>);

\*\*Example:\*\* CREATE DATABASE company; or CREATE TABLE employees (id INT, name VARCHAR(50));

### DROP

\*\*Purpose:\*\* Deletes a database or a table permanently.

\*\*Syntax:\*\* DROP DATABASE <database\_name>; or DROP TABLE <table\_name>;

\*\*Example:\*\* DROP DATABASE company; or DROP TABLE employees;

### EXIT

\*\*Purpose:\*\* Exits the DinoDB client or terminal.

\*\*Syntax:\*\* EXIT; or QUIT;

\*\*Example:\*\* EXIT;

### GRANT

\*\*Purpose:\*\* Assigns specific permissions to a user for databases or tables.

\*\*Syntax:\*\* GRANT <permission> ON <database|table> TO <user>;

\*\*Example:\*\* GRANT SELECT ON company TO user1;

### INSERT

\*\*Purpose:\*\* Inserts a new row into the specified table.

\*\*Syntax:\*\* INSERT INTO <table\_name> (columns) VALUES (values);

\*\*Example:\*\* INSERT INTO employees (id, name) VALUES (1, 'John Doe');

### RESTART

\*\*Purpose:\*\* Restarts the DinoDB service.

\*\*Syntax:\*\* RESTART; or REBOOT;

\*\*Example:\*\* RESTART;

### SELECT

\*\*Purpose:\*\* Retrieves data from a table.

\*\*Syntax:\*\* SELECT <columns> FROM <table\_name>;

\*\*Example:\*\* SELECT \* FROM employees;

### SET

\*\*Purpose:\*\* Changes user settings, such as passwords.

\*\*Syntax:\*\* SET PASSWORD FOR <user> = <new\_password>;

\*\*Example:\*\* SET PASSWORD FOR admin = 'new\_secure\_password';

### SHOW

\*\*Purpose:\*\* Displays a list of databases, tables, or grants.

\*\*Syntax:\*\* SHOW DATABASES; or SHOW TABLES;

\*\*Example:\*\* SHOW DATABASES; or SHOW TABLES;

## Security and Permissions

DinoDB employs a permission-based system to ensure the security of databases and tables. The GRANT command is used to assign specific privileges to users. Ensure that only authorized users have access to sensitive operations.

## Troubleshooting Common Issues

If you face issues while using DinoDB commands, consider the following:  
- Verify that the command syntax is correct.  
- Ensure that you have the necessary permissions to execute the command.  
- Check if the specified database or table exists.  
- Look at the error logs for more information.  
- For connectivity issues, confirm that the server is running and accessible.