Command Type	Syntax	Example	Description
Add a New Column	ALTER TABLE table_name ADD column_name column_definition;	ALTER TABLE employees ADD email VARCHAR(255);	Adds a new column (email) to the employees table.
Modify an Existing Column	ALTER TABLE table_name MODIFY column_name new_column_definition;	ALTER TABLE employees MODIFY hourly_pay DECIMAL(10, 2) NOT NULL;	Modifies the definition of an existing column (hourly_pay) in the employees table.
Drop a Column	ALTER TABLE table_name DROP COLUMN column_name;	ALTER TABLE employees DROP COLUMN email;	Removes an existing column (email) from the employees table.
Rename a Column	MySQL does not directly support RENAME COLUMN within ALTER TABLE. Typically done indirectly through CHANGE or MODIFY.	N/A	Renames a column by changing its definition or using CHANGE COLUMN.
Add an Index	ALTER TABLE table_name ADD INDEX index_name (column_name);	ALTER TABLE employees ADD INDEX idx_department_id (department_id);	Adds an index (idx_department_id) on the department_id column in the employees table.
Drop an Index	ALTER TABLE table_name DROP INDEX index_name;	ALTER TABLE employees DROP INDEX idx_department_id;	Removes an index (idx_department_id) from the employees table.
Add a Primary Key	ALTER TABLE table_name ADD PRIMARY KEY (column_name);	ALTER TABLE employees ADD PRIMARY KEY (employee_ID);	Adds a primary key constraint on the employee_ID column in the employees table.
Drop a Primary Key	ALTER TABLE table_name DROP PRIMARY KEY;	ALTER TABLE employees DROP PRIMARY KEY;	Removes the primary key constraint from the employees table.
Add a Foreign Key Constraint	ALTER TABLE table_name ADD CONSTRAINT constraint_name FOREIGN KEY (column_name) REFERENCES other_table (other_column);	ALTER TABLE employees ADD CONSTRAINT fk_department_id FOREIGN KEY (department_id) REFERENCES departments (department_id);	Adds a foreign key constraint (fk_department_id) on the department_id column in employees referencing departments.department_id.
Drop a Foreign Key Constraint	ALTER TABLE table_name DROP FOREIGN KEY constraint_name;	ALTER TABLE employees DROP FOREIGN KEY fk_department_ld;	Removes a foreign key constraint (fk_department_id) from the employees table.
Sources			