**Summary of ALTER Table Functions**

* Add a new column: **ADD**
* Modify an existing column: **MODIFY**
* Rename a column: **RENAME COLUMN**
* Drop a column: **DROP COLUMN**
* Rename a table: **RENAME TO**
* Add constraints: **ADD CONSTRAINT**
* Drop constraints: **DROP CONSTRAINT**
* Set default values: **DEFAULT**
* Add auto-increment: **AUTO\_INCREMENT**

1. **Adding a New Column**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **ADD age INT;** | **ALTER TABLE table\_name**  **ADD column\_name column\_definition;** |

2. **Modifying an Existing Column**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **MODIFY age VARCHAR(3);** | **ALTER TABLE table\_name**  **MODIFY column\_name new\_definition;** |

3. **Renaming a Column**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **RENAME COLUMN age TO student\_age;** | **ALTER TABLE table\_name**  **RENAME COLUMN old\_column\_name TO new\_column\_name;** |

4. **Dropping a Column**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **DROP COLUMN student\_age;** | **ALTER TABLE table\_name**  **DROP COLUMN column\_name;** |

5. **Renaming a Table**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **RENAME TO university\_students;** | **ALTER TABLE old\_table\_name**  **RENAME TO new\_table\_name;** |

6. **Adding a Constraint**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **MODIFY email VARCHAR(50) NOT NULL;** | **ALTER TABLE students**  **ADD CONSTRAINT unique\_email UNIQUE (email);** |

7. **Dropping a Constraint**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **DROP CONSTRAINT unique\_email;** | **ALTER TABLE table\_name**  **DROP CONSTRAINT constraint\_name;** |

8. **Changing Column Default Values**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **ALTER age DROP DEFAULT;** | **ALTER TABLE students**  **MODIFY age INT DEFAULT 18;** |

9. **Auto Incrementing a Column**

|  |  |
| --- | --- |
| **ALTER TABLE students**  **MODIFY student\_id INT AUTO\_INCREMENT;** |  |