1. Write a query to insert a new employee into the Employees table with values (1, 'John', 'HR', 50000).
2. Write a query to insert multiple rows into a table in a single query.
3. Write an INSERT query where only some columns are provided (not all).
4. Write a query to update the salary of an employee with ID = 101 to 60000.

Answer:

UPDATE Employees SET Salary = 50000 WHERE ID = 1;

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | Manimaran | Mechanical | 21 | manimaran@example.com | 50000 |
| 2 | John | HR | 28 | john.hr@example.com | 60000 |
| 3 | Alice | IT | 25 | alice.it@example.com | 55000 |
| 4 | Bob | Sales | 30 | bob.sales@example.com | 60000 |
| 5 | Meena | Finance | 26 | meena.finance@example.com | 58000 |
| 6 | Ravi | Marketing | 29 | ravi.marketing@example.com | 57000 |

1. Update the department of all employees from 'Sales' to 'Marketing'.

Answer:

UPDATE Employees SET em\_department = 'Marketing' WHERE em\_department = 'Sales';

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | manimaran | Mechanical | 21 | manimaran@example.com | 50000 |
| 2 | John | HR | 28 | john.hr@example.com | 60000 |
| 3 | Alice | IT | 25 | alice.it@example.com | 60500 |
| 4 | Bob | Marketing | 30 | bob.sales@example.com | 60000 |
| 5 | Meena | Finance | 26 | meena.finance@example.com | 58000 |
| 6 | Ravi | Marketing | 29 | ravi.marketing@example.com | 57000 |

1. Increase salary by 10% for all employees in the 'IT' department.

Answer:

UPDATE Employees SET Salary = Salary \* 1.10 WHERE Department = 'IT';

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | Dhanigavel.S | Mechanical | 21 | dhanigavel@example.com | 50000 |
| 2 | John | HR | 28 | john.hr@example.com | 60000 |
| 3 | Alice | IT | 25 | alice.it@example.com | 60500 |
| 4 | Bob | Marketing | 30 | bob.sales@example.com | 60000 |
| 5 | Meena | Finance | 26 | meena.finance@example.com | 58000 |
| 6 | Ravi | Marketing | 29 | ravi.marketing@example.com | 57000 |

1. Write a query to update multiple columns in a table using a single statement.

Answer:

UPDATE Employees SET em\_name = 'Dhanigavel.S', em\_department = 'Mechanic' WHERE ID=1;

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | Dhanigavel.S | Mechanic | 21 | dhanigavel@example.com | 50000 |
| 2 | John | HR | 28 | john.hr@example.com | 60000 |
| 3 | Alice | IT | 25 | alice.it@example.com | 60500 |
| 4 | Bob | Marketing | 30 | bob.sales@example.com | 60000 |
| 5 | Meena | Finance | 26 | meena.finance@example.com | 58000 |
| 6 | Ravi | Marketing | 29 | ravi.marketing@example.com | 57000 |

1. Write a query to delete a record from the Employees table where ID = 5.

Answer:

DELETE FROM Employees WHERE ID = 5;

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | Dhanigavel.S | Mechanic | 21 | dhanigavel@example.com | 50000 |
| 2 | John | HR | 28 | john.hr@example.com | 60000 |
| 3 | Alice | IT | 25 | alice.it@example.com | 60500 |
| 4 | Bob | Marketing | 30 | bob.sales@example.com | 60000 |
| 6 | Ravi | Marketing | 29 | ravi.marketing@example.com | 57000 |

1. Delete all employees whose department is 'HR'.

Answer:

DELETE FROM Employees WHERE em\_department = 'HR';

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | Dhanigavel.S | Mechanic | 21 | dhanigavel@example.com | 50000 |
| 3 | Alice | IT | 25 | alice.it@example.com | 60500 |
| 4 | Bob | Marketing | 30 | bob.sales@example.com | 60000 |
| 6 | Ravi | Marketing | 29 | ravi.marketing@example.com | 57000 |

1. Delete all records from a table but keep the structure.

Answer:

DELETE FROM Employees;

1. Write a delete query using a subquery to delete specific rows.

Answer:

DELETE FROM Employees WHERE ID IN (SELECT ID FROM Employees WHERE Salary < 60000);

1. Write a query to create a table called Students with columns: ID, Name, Age, and Email.
2. Create a table Orders with a foreign key referencing the Customers table.
3. Write a query to create a table with a unique constraint on the email column.
4. Create a table and set the default value of the status column to 'Active'.

Answer:

Create Table Accounts (

ID Int,

Status Varchar(20) Default 'Active'

);

1. Create a table with a primary key on multiple columns.

Answer:

Create Table Enrollment (

StudentID INT,

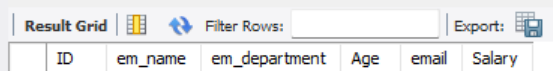
CourseID INT,

PRIMARY KEY (StudentID, CourseID)

);

1. Write a query to drop a table named TempData.

Answer:



1. Drop only the primary key constraint from a table.

Answer:

ALTER TABLE Employees DROP CONSTRAINT PK\_Employees;

select \* from PK\_Employees;

1. Write a query to drop a column from an existing table.
2. Drop all indexes on a given table.
3. Write a query to add a new column DOB of type DATE to the Employees table.
4. Modify the data type of the column Salary from INT to FLOAT.
5. Rename a column in a table from fullname to name.
6. Rename the table Customers to Clients.
7. Add a NOT NULL constraint to the email column in the Users table.
8. Truncate a table and insert one row back using INSERT.
9. Truncate multiple tables in one transaction (if supported).