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Write the commands that will solve each statement. Then, apply it on Microsoft SQL Server:

1. Create a table with the name COMPANY which has these columns:   
   (id INT PRIMARY KEY, name VARCHARE(50), age INT, address CHAR(50), salary FLOAT).

create table Company (

id int primary key,

name varchar(50),

age int,

address char(50),

salary float

);

1. Insert into the previous table this data:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | NAME | AGE | ADDRESS | SALARY |
| 5252 | Ahmed | 26 | Cairo, Egypt | 8000 |
| 782782 | Mohamed | 25 | Alexandria, Egypt | 8200 |
| 144 | Amira | 32 | Giza, Egypt | 7500 |
| 4347 | Nada | 22 | Giza, Egypt | 5000 |
| 3826 | Omar | 38 | Cairo, Egypt | 9500 |

INSERT INTO COMPANY (id, name, age, address, salary) VALUES

(5252, 'Ahmed', 26, 'Cairo, Egypt', 8000),

(782782, 'Mohamed', 25, 'Alexandria, Egypt', 8200),

(144, 'Amira', 32, 'Giza, Egypt', 7500),

(4347, 'Nada', 22, 'Giza, Egypt', 5000),

(3826, 'Omar', 38, 'Cairo, Egypt', 9500);

1. Insert the following row, and check if any errors occur:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4347 | Nada | 22 | Giza, Egypt | 5000 |

-- error (The duplicate key value)

--INSERT INTO COMPANY (id, name, age, address, salary) VALUES (4347, 'Nada', 22, 'Giza, Egypt', 5000);

1. Add new columns to the precious table called ‘role’ VARCHAR(50) and ‘gender’ with type VARCHAR(10).

ALTER TABLE COMPANY

ADD role VARCHAR(50),

gender VARCHAR(10);

1. Insert the following Data:

* 1. ID: 5977
  2. Name: Ramy
  3. Age: 30

INSERT INTO COMPANY (id, name, age) VALUES (5977, 'Ramy', 30);

1. Drop the ‘gender’ column.

ALTER TABLE COMPANY

drop column gender;

1. Insert new employees into the COMPANY table with the following details:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | NAME | AGE | ADDRESS | SALARY |
| 6789 | Sara | 28 | Mansoura, Egypt | 6700 |
| 7890 | Khaled | 45 | Aswan, Egypt | 10500 |
| 8901 | Hanaa | 33 | Luxor, Egypt | 8000 |
| 9012 | Youssef | 29 | Hurghada, Egypt | 7300 |
| 1234 | Laila | 41 | Alexandria, Egypt | 9200 |
| 2345 | Mahmoud | 37 | Fayoum, Egypt | 8600 |
| 3456 | Nour | 27 | Ismailia, Egypt | 6800 |
| 4567 | Ali | 50 | Port Said, Egypt | 11000 |
| 5678 | Hesham | 36 | Damietta, Egypt | 8700 |
| 6780 | Fatma | 34 | Suez, Egypt | 8200 |

INSERT INTO COMPANY (id, name, age, address, salary) VALUES

(6789, 'Sara', 28, 'Mansoura, Egypt', 6700),

(7890, 'Khaled', 45, 'Aswan, Egypt', 10500),

(8901, 'Hanaa', 33, 'Luxor, Egypt', 8000),

(9012, 'Youssef', 29, 'Hurghada, Egypt', 7300),

(1234, 'Laila', 41, 'Alexandria, Egypt', 9200),

(2345, 'Mahmoud', 37, 'Fayoum, Egypt', 8600),

(3456, 'Nour', 27, 'Ismailia, Egypt', 6800),

(4567, 'Ali', 50, 'Port Said, Egypt', 11000),

(5678, 'Hesham', 36, 'Damietta, Egypt', 8700),

(6780, 'Fatma', 34, 'Suez, Egypt', 8200);

1. Update the role for Amira, Nada, and Ahmed to be ‘IT\_Support’.

UPDATE COMPANY SET role = 'IT Support'

WHERE name IN ('Amira', 'Nada', 'Ahmed');

1. Update the role for Mohamed and Omar as ‘Manager’.

UPDATE COMPANY SET role = 'Manager'

where name in ('Mohamed','Omar');

1. Select all columns from the COMPANY table where the role is 'Manager'.

select \* from Company where role='Manager';

1. Select the unique roles from the COMPANY table.

select distinct role from Company ;

1. Delete Nada’s Data.

DELETE FROM COMPANY WHERE name = 'Nada';

1. Update the address and salary of Amira, the new address is ‘Cairo, Egypt’, and the new salary is 8500.

update Company set address='Cairo', salary='8500'

where name = 'Amira';

1. Insert a new employee into the COMPANY table with the following details: ID = 3456, name = 'Samir', age = 40, address and salary are null.

-- error

-- insert into Company (id,name,age) values (3456,'Samir',40);

1. Select the name and salary of employees from the COMPANY table and display the salary column as Employee\_Salary.

select name , salary as Employee\_Salary from Company

1. Select all employees from the COMPANY table where the age is greater than 30.

SELECT \* FROM COMPANY WHERE age > 30;

1. Update the salary of all employees by 10%.

UPDATE COMPANY SET salary = salary \* 1.10;

1. Select all employees older than 35 or with a salary greater than 800.

SELECT \* FROM COMPANY WHERE age > 35 OR salary > 800;

1. Select all employees who are older than 25 and have a salary of less than 9000.

SELECT \* FROM COMPANY WHERE age > 25 AND salary < 9000;

1. Select all employees who do not live in 'Cairo, Egypt'.

SELECT \* FROM COMPANY WHERE address <> 'Cairo, Egypt';

1. Select all employees whose salary is between 5000 and 8000.

SELECT \* FROM COMPANY WHERE salary BETWEEN 5000 AND 8000;

1. Select the name and salary of all employees and display an additional column annual\_salary which is the salary multiplied by 12.

SELECT name, salary, salary \* 12 AS annual\_salary

FROM COMPANY;

1. Select all employees who are older than 30, have a salary greater than 7000, and do not live in 'Giza, Egypt'.

SELECT \*

FROM COMPANY

WHERE age > 30 AND salary > 7000 AND address <> 'Giza, Egypt';