-- Create 'customers' table

CREATE TABLE customers (

customer\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

email VARCHAR(100),

address VARCHAR(100)

);

-- Create 'employees' table

CREATE TABLE employees (

employee\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

age VARCHAR(10), -- This will be modified later to INT

salary DECIMAL(10, 2),

department\_id INT

);

-- Create 'contacts' table

CREATE TABLE contacts (

contact\_id INT PRIMARY KEY,

name VARCHAR(50),

address VARCHAR(100) -- This will be renamed later to 'home\_address'

);

-- Create 'departments' table

CREATE TABLE departments (

department\_id INT PRIMARY KEY,

department\_name VARCHAR(50)

);

-- Create 'students' table

CREATE TABLE students (

student\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

email VARCHAR(100)

);

-- Create 'users' table

CREATE TABLE users (

user\_id INT PRIMARY KEY,

username VARCHAR(50),

email VARCHAR(100) -- This will have a unique constraint added later

);

-- Create 'inventory' table

CREATE TABLE inventory (

product\_id INT PRIMARY KEY,

product\_name VARCHAR(50),

quantity INT -- Default value will be set later

);

-- Create 'products' table

CREATE TABLE products (

product\_id INT PRIMARY KEY AUTO\_INCREMENT,

product\_name VARCHAR(50),

price DECIMAL(10, 2)

);

-- Create 'locations' table

CREATE TABLE locations (

location\_id INT,

street\_address VARCHAR(100),

postal\_code VARCHAR(20),

city VARCHAR(50),

state\_province VARCHAR(50), -- This will be renamed to 'state' later

country\_id VARCHAR(2),

PRIMARY KEY (location\_id)

);

-- Create 'job\_history' table

CREATE TABLE job\_history (

employee\_id INT,

job\_id VARCHAR(10),

department\_id INT,

start\_date DATE,

end\_date DATE

);

-- Create 'jobs' table

CREATE TABLE jobs (

job\_id VARCHAR(10) PRIMARY KEY,

job\_title VARCHAR(50),

min\_salary DECIMAL(10, 2),

max\_salary DECIMAL(10, 2)

);

1. Write a query to add a new column named 'phone\_number' of type VARCHAR(20) to a table named 'customers'.

2. Write a query to modify the data type of the column 'age' in a table named 'employees' to INT.

3. Write a query to rename the column 'address' to 'home\_address' in a table named 'contacts'.

4. Write a query to add a foreign key constraint named 'fk\_department' to a column named 'department\_id' in a table named 'employees', referencing the 'department\_id' column in a table named 'departments'.

5. Write a query to drop the primary key constraint from a table named 'students'.

6. Write a query to add a unique constraint named 'uc\_email' to a column named 'email' in a table named 'users'.

7. Write a query to add a default value of '0' to a column named 'quantity' in a table named 'inventory'.

8. Write a query to modify the position of the column 'last\_name' to be the first column in a table named 'customers'.

9. Write a query to change the auto-increment value of a column named 'product\_id' to start from 1001 in a table named 'products'.

10. Write a query to add a check constraint named 'chk\_salary' to a column named 'salary' in a table named 'employees', ensuring that the salary is greater than or equal to 2000.

Based on hr database

1. Write a SQL statement to rename the table countries to country\_new.

2. Write a SQL statement to add a column region\_id to the table locations.

3. Write a SQL statement to add a column ID as the first column of the table locations.

4. Write a SQL statement to add a column region\_id after state\_province to the table locations.

5. Write a SQL statement to change the data type of the column country\_id to integer in the table locations.

6. Write a SQL statement to drop the column city from the table locations.

7. Write a SQL statement to change the name of the column state\_province to state, keeping the data type and size same.

8. Write a SQL statement to add a primary key for the columns location\_id in the locations table.

9. Write a SQL statement to add a primary key for a combination of columns location\_id and country\_id.

10. Write a SQL statement to drop the existing primary from the table locations on a combination of columns location\_id and country\_id.

11. Write a SQL statement to add a foreign key on the job\_id column of the job\_history table referencing the primary key job\_id of jobs table.

12. Write a SQL statement to add a foreign key constraint named fk\_job\_id on the job\_id column of the job\_history table referencing the primary key job\_id of the jobs table.

13. Write a SQL statement to drop the existing foreign key fk\_job\_id from the job\_history table on job\_id column which is referencing the job\_id of jobs table.

14. Write a SQL statement to add an index named indx\_job\_id on job\_id column in the table job\_history.

15. Write a SQL statement to drop the index indx\_job\_id from job\_history table.

16. Write a query to change the length of the email column in the customers table to VARCHAR(150).

17. Write a query to add a new column status of type VARCHAR(10) with a default value of 'active' to the employees table.

18. Write a query to drop the phone\_number column from the customers table.

19. Write a query to modify the department\_name column in the departments table to ensure it cannot contain NULL values.

20. Write a query to drop the UNIQUE constraint on the email column in the users table.

21. Write a query to rename the inventory table to product\_inventory.

22.Write a query to add a foreign key constraint on the employee\_id column of the job\_history table, referencing the employee\_id column of the employees table, with ON DELETE CASCADE.

23.Write a query to change the default value of the status column in the employees table to 'inactive'.

24.Write a query to drop the foreign key constraint named fk\_department from the employees table.

25.Write a query to move the salary column to be after the last\_name column in the employees table.

26.Write a query to remove the default value from the status column in the employees table.

27. Write a query to rename the uc\_email constraint on the email column in the users table to unique\_email\_constraint.

28.Write a query to disable the foreign key constraint fk\_department on the employees table and then re-enable it.

29.Write a query to change the age column in the employees table to SMALLINT and allow it to accept NULL values.