CREATING TABLE :

Now we are going to create our own table ,

CREATE TABLE();

DATA TYPES :

INT - numbers
DECIMAL - (M.N)
VARCHAR - strings
BLOB - binary object,stores large data
DATE - (YYYY-MM-DD)
TIMESTAMP - (YYYY-MM-DD.HH:MM:SS)

ADDING COLUMNS IN TABLE:

```
CREATE TABLE student(
Student_id INT PRIMARY KEY(),
Name VARCHAR(20),
age INT,
Gender VARCHAR(10),
Email VARCHAR(30),
Dob DATE ,
Major VARCHAR(40)
);
```

INSERTING VALUES :

INSERT INTO student VALUES (1 , ‘swetha’, 22 , ’female’ , ’swethajk@gmail.com’ , 2001-03-15 , 'bio');

INSERT INTO student VALUES (2 , ‘sowmiya’ , 23 , ‘female’ , ‘sow@gmail.com’ , 2001-11-25 , ‘bio’);

So on ……..,

TO GRAB ALL INFO:

SELECT * FROM student;

DELETE THE TABLE:

DROP TABLE student;

DELETE FROM student
WHERE name = ‘sowmiya’ AND major = ‘bio’;

DELETE FROM student;

TO ALTER:

```
ALTER TABLE student ADD gpa
DECIMAL(M,N);
```

TO UPDATE:

```
UPDATE student
SET major = 'biology'
WHERE major = 'bio';

UPDATE student
SET major = 'computer science'
WHERE student_id = 4;

UPDATE student
SET major = 'biochemistry'
WHERE major = 'bio' or major = 'chemistry';
```

Q & A:

Complete the following task:

Create a new database called "School" this database should have two tables: **teachers** and **students.**

The **students** table should have columns for student_id, first_name,last_name, homeroom_number, phone,email, and graduation year.

The **teachers** table should have columns for teacher_id, first_na me, last_name,

homeroom_number, department, email, and phone.

The constraints are mostly up to you, but your table constraints do have to consider the following:

1. We must have a phone number to contact students in case of an emergency.
2. We must have ids as the primary key of the tables
3. Phone numbers and emails must be unique to the individual.

Once you've made the tables, insert a student named Mark Watney (student_id=1) who has a phone number of 777-555-1234 and doesn't have an email. He graduates in 2035 and has 5 as a homeroom number.

Then insert a teacher names Jonas Salk (teacher_id = 1) who as a homeroom number of 5 and is from the Biology department. His contact info is: jsalk@school.org and a phone number of 777-555-4321.

Keep in mind that these insert tasks may affect your constraints!

ANSWERS:

To create the students table:

```
CREATE TABLE students(
student_id serial PRIMARY KEY,
first_name VARCHAR(45) NOT NULL,
last_name VARCHAR(45) NOT NULL,
homeroom_number integer,
phone VARCHAR(20) UNIQUE NOT NULL,
email VARCHAR(115) UNIQUE,
grad_year integer);
```

To create the teachers table:

```
CREATE TABLE teachers(
teacher_id serial PRIMARY KEY,
first_name VARCHAR(45) NOT NULL,
last_name VARCHAR(45) NOT NULL,
homeroom_number integer,
department VARCHAR(45),
email VARCHAR(20) UNIQUE,
phone VARCHAR(20) UNIQUE);
```

Then for inserting the student information:

```
INSERT INTO
students(first_name,last_name, homeroom_number,phone,grad_year)VALUES
('Mark','Watney',5,'7755551234',2035);
```

Then for inserting the teacher information:

```
INSERT INTO
teachers(first_name,last_name, homeroom_number,department,email,phone)VALUE
S ('Jonas','Salk',5,'Biology','jsalk@school.org','7755554321');
```

Assessment Test 3

Assessment Test 3

Welcome to your final assessment test! This will test your knowledge of the previous section, focused on creating databases and table operations. This test will actually consist of a more open-ended assignment below:

Complete the following task:

Create a new database called "School" this database should have two tables: **teachers** and **students.**
The **students** table should have columns for student_id, first_name,last_name, homeroom_number, phone,email, and graduation year.
The **teachers** table should have columns for teacher_id, first_name, last_name, homeroom_number, department, email, and phone.
The constraints are mostly up to you, but your table constraints do have to consider the following:

1} We must have a phone number to contact students in case of an emergency.

2} We must have ids as the primary key of the tables

3} Phone numbers and emails must be unique to the individual.

Once you've made the tables, insert a student named Mark Watney (student_id=1) who has a phone number of 777-555-1234 and doesn't have an email. He graduates in 2035 and has 5 as a homeroom number.
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Keep in mind that these insert tasks may affect your constraints!