

#For creating Databases

```
CREATE DATABASE IF NOT EXISTS campusx
```

#for creating table

```
CREATE TABLE users(  
    user_id INTEGER,  
    name VARCHAR(255),  
    email VARCHAR(255),  
    password VARCHAR(255)  
)
```

#empty the table

```
TRUNCATE TABLE users
```

#for dropping the table

```
DROP TABLE IF EXISTS users
```

#constraint

not null

```
CREATE TABLE users(  
    user_id INTEGER NOT NULL,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255),  
    password VARCHAR(255)  
)
```

unique

```
CREATE TABLE users(  
    user_id INTEGER NOT NULL,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) NOT NULL UNIQUE,  
    password VARCHAR(255) NOT NULL  
)
```

```
CREATE TABLE users(  
    user_id INTEGER NOT NULL,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) NOT NULL UNIQUE,  
    password VARCHAR(255) NOT NULL,  
    #second ways  
    CONSTRAINT users_email_unique UNIQUE (name,email)  
)
```

auto increment

```
CREATE TABLE users(  
    user_id INTEGER PRIMARY KEY AUTO_INCREMENT,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) NOT NULL UNIQUE,  
    password VARCHAR(255) NOT NULL  
)
```

#check

```
CREATE TABLE students(  
    student_id INTEGER PRIMARY KEY AUTO_INCREMENT,  
    name VARCHAR(50) NOT NULL,  
    age INTEGER CHECK(age > 6 AND age < 25),  
  
    CONSTRAINT student_age_check CHECK (age > 6 AND age < 25)  
)
```

#Foreign key

```
CREATE TABLE customers(  
  
    cid INTEGER PRIMARY KEY AUTO_INCREMENT,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) NOT NULL UNIQUE  
  
)  
  
CREATE TABLE orders(  
    order_id INTEGER PRIMARY KEY AUTO_INCREMENT,  
    cid INTEGER NOT NULL,  
    order_date DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  
    CONSTRAINT order_fk FOREIGN KEY (cid) REFERENCES customers(cid)  
  
)
```

#cascade

```
CREATE TABLE orders(  
    order_id INTEGER PRIMARY KEY,  
    cid INTEGER NOT NULL,  
    order_date DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  
    CONSTRAINT order_fk FOREIGN KEY (cid) REFERENCES customers(cid)  
    ON DELETE CASCADE  
    ON UPDATE CASCADE  
  
)
```

#ALTER COMMAND

```
ALTER TABLE customers ADD COLUMN surname VARCHAR(255) NOT NULL AFTER name
```

```
ALTER TABLE customers  
ADD COLUMN pan_number VARCHAR(255) AFTER surname,  
ADD COLUMN joining_date DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP
```

#Delete command

```
ALTER TABLE customers DROP COLUMN pan_number
```

```
ALTER TABLE customers  
DROP COLUMN password,  
DROP COLUMN joining_date
```

#modify

```
ALTER TABLE customers MODIFY COLUMN surname INTEGER
```

```
ALTER TABLE customers ADD COLUMN age INTEGER NOT NULL
```

```
ALTER TABLE customers ADD CONSTRAINT customer_age_check CHECK(age>13)
```

```
ALTER TABLE customers DROP CONSTRAINT customer_age_check  
ALTER TABLE customers ADD CONSTRAINT customer_age_check CHECK (age >6)
```