CREATE table Students(

id INT NOT NULL,

name VARCHAR(31) NOT NULL,

age INT NOT NULL,

PRIMARY KEY (id),

INDEX(name)

)ENGINE=INNODB;

INSERT INTO Students VALUES (1, 'Joe Chen', 31);

INSERT INTO STUDENTS VALUES (2, 'Patrick Shih', 28);

INSERT INTO Students VALUES (3, 'Amy Lin', 2);

INSERT INTO Students VALUES (4, 'Kenneth Shaw', 28);

SELECT \* FROM Students;

SELECT \* FROM Students

WHERE age=31;

SELECT \* FROM Students

WHERE age=31 OR name=’Amy Lin’

DELETE FROM Students WHERE age=31

UPDATE `Students` SET `age` = '26' WHERE name='Amy Lin';

SELECT \* FROM Students

ORDER BY name;

SELECT count(\*) FROM Students;

SELECT sum(age) FROM Students;

SELECT avg(age) FROM Students;

SELECT \* FROM Students

WHERE name LIKE “%Chen”;

CREATE TABLE Clubs(

name VARCHAR(31) NOT NULL,

studentid INT NOT NULL,

PRIMARY KEY (name,studentid)

)ENGINE=INNODB;

INSERT INTO Clubs VALUES ('Basketball', SELECT id FROM Students WHERE name='Kenneth')

INSERT INTO Clubs VALUES ('Basketball', SELECT id FROM Students WHERE name='Patrick')

INSERT INTO Clubs VALUES ('Kayak', SELECT id FROM Students WHERE name='Patrick')

INSERT INTO Clubs VALUES ('Kayak', SELECT id FROM Students WHERE name='Amy');

INSERT INTO Clubs VALUES ('Basketball', 4);

INSERT INTO Clubs VALUES ('Basketball', 2);

INSERT INTO Clubs VALUES ('Kayak', 2);

INSERT INTO Clubs VALUES ('Kayak', 3);

SELECT \* FROM Students s

JOIN Clubs c ON s.id=c.studentid

WHERE c.name='Basketball';

CREATE TABLE Teacher(

id INT NOT NULL,

name VARCHAR(31) NOT NULL,

PRIMARY KEY (id),

INDEX(name)

)ENGINE=INNODB;

CREATE TABLE Class (

id INT NOT NULL,

name VARCHAR(31) NOT NULL,

teacherid INT NOT NULL,

studentid INT NOT NULL,

INDEX(name)

)ENGINE=INNODB;

INSERT INTO Teacher VALUES(1, 'CK');

INSERT INTO Class VALUES(1, 344, 1, 1);

INSERT INTO Class VALUES(1, 344, 1, 2);

INSERT INTO Class VALUES(2, 200, 1, 3);

INSERT INTO Class VALUES(2, 200, 1, 1);

SELECT s.name FROM Students s

JOIN Class c ON s.id=c.studentid

WHERE c.name='344';

SELECT t.name, count(DISTINCT s.name) as NumOfStudents FROM Teacher t

JOIN Class c ON t.id=c.teacherid

JOIN Students s ON c.studentid=s.id;