创建表：

CREATE DATABASE S\_T;

use S\_T;

CREATE TABLE Student (

Sno CHAR(9) PRIMARY KEY,

Sname CHAR(20) UNIQUE,

Ssex CHAR(2),

Sage SMALLINT,

Sdept CHAR(20)

);

CREATE TABLE Course (

Cno CHAR(4) PRIMARY KEY,

Cname CHAR(40) NOT NULL,

Cpno CHAR(4),

Ccredit SMALLINT

);

CREATE TABLE SC (

Sno CHAR(9) NOT NULL,

Cno CHAR(4) NOT NULL,

Grade SMALLINT,

PRIMARY KEY (Sno, Cno),

FOREIGN KEY (Sno) REFERENCES Student(Sno),

FOREIGN KEY (Cno) REFERENCES Course(Cno)

);

插入示例数据：

INSERT INTO Student (Sno, Sname, Ssex, Sage, Sdept) VALUES

('201215121', '李勇', '男', 20, 'CS'),

('201215122', '刘晨', '女', 19, 'CS'),

('201215123', '王敏', '女', 18, 'MA'),

('201215124', '张立', '男', 19, 'IS');

INSERT INTO Course (Cno, Cname, Cpno, Ccredit) VALUES

('1', '数据库', '5', 4),

('2', '数学', NULL, 2),

('3', '信息系统', '1', 4),

('4', '操作系统', '6', 3),

('5', '数据结构', '7', 4),

('6', '数据处理', '2', NULL),

('7', 'PASCAL语言', '6', 4);

INSERT INTO SC (Sno, Cno, Grade) VALUES

('201215121', '1', 92),

('201215121', '2', 85),

('201215121', '3', 88),

('201215122', '2', 90),

('201215122', '3', 86),

('201215123', '3', 87),

('201215123', '1', 56),

('201215124', '5', 88),

('201215124', '6', 67);

查询所有学生的姓名和学号：

SELECT Sno, Sname FROM Student;

浏览所有课程信息：

SELECT \* FROM Course;

查询学生的详细情况：学号、姓名、性别、年龄、所在系；

SELECT Sno, Sname, Ssex, Sage, Sdept FROM Student;

查询学生的选课情况：学生姓名、课程名称、成绩；

mathematica

SELECT S.Sname, C.Cname, SC.Grade

FROM Student S, Course C, SC

WHERE S.Sno = SC.Sno AND C.Cno = SC.Cno;

查询年龄在19至20之间的所有学生；

SELECT \* FROM Student WHERE Sage BETWEEN 19 AND 20;

查询计算机学生的学号和姓名；

SELECT Sno, Sname FROM Student WHERE Sdept = 'CS';

查询学号“201215121”的学生选课情况；

mathematica

SELECT C.Cname, SC

10.

要查询所有以“数据”开头的相关课程详细情况，可以使用如下的语句：

SELECT \* FROM course WHERE Cname LIKE '数据%';

这将返回课程表中所有以“数据”开头的课程的详细信息。其中，LIKE是的模糊匹配操作符，%代表任意长度的字符串，所以查询条件'数据%'表示以“数据”开头的字符串。

11.查询姓“刘”的学生学号、姓名和所在系：

SELECT Sno, Sname, Sdept FROM student WHERE Sname LIKE '刘%';

查询所有姓名中有“阳”的学生姓名：

SELECT Sname FROM student WHERE Sname LIKE '%阳%';

查询“张立”同学所选课程，得到姓名，学号，课程号，成绩：

SELECT student.Sname, SC.Sno, SC.Cno, SC.Grade

FROM student, SC

WHERE student.Sno = SC.Sno AND student.Sname = '张立';

查询选修了1号课程并且成绩在60分以下的学生的学号：

SELECT Sno FROM SC WHERE Cno = '1' AND Grade < 60;

查询学生学号为“201215121”所选课程成绩为60以上的课程号：

SELECT Cno FROM SC WHERE Sno = '201215121' AND Grade >= 60;

查询“计算机”系的所有女生的详细情况：

SELECT \* FROM student WHERE Sdept = '计算机' AND Ssex = '女';

查询没有选修“数学”课程的学生的学号、姓名：

SELECT student.Sno, student.Sname

FROM student

WHERE NOT EXISTS (SELECT \* FROM SC WHERE SC.Sno = student.Sno AND SC.Cno = '2');

查询不是“CS””系的学生姓名和所在系：

SELECT Sname, Sdept FROM student WHERE Sdept != 'CS';

查询所有课程的课程名、选课学生姓名、性别，同一门课程按性别排序：

SELECT course.Cname, student.Sname, student.Ssex

FROM student, course, SC

WHERE student.Sno = SC.Sno AND course.Cno = SC.Cno

ORDER BY course.Cname, student.Ssex;

求每位学生的选课数目：

SELECT Sno, COUNT(\*) AS '选课数目' FROM SC GROUP BY Sno;

21.求每个系的学生人数：

SELECT Sdept, COUNT(\*) AS NumOfStudents

FROM Student

GROUP BY Sdept;

查询选课人数大于等于2的课程名称：

SELECT Cname

FROM Course

WHERE Cno IN (SELECT Cno FROM SC GROUP BY Cno HAVING COUNT(\*) >= 2);

求“数据库”课程的最高分：

SELECT MAX(Grade)

FROM SC

WHERE Cno = '1';

求“刘晨”的所选课程的平均分：

SELECT AVG(Grade)

FROM SC

WHERE Sno = '201215122';

删除课程号为“5”的课程记录：

DELETE FROM SC WHERE Cno='5';

DELETE FROM Course WHERE Cno='5';

删除“数据库”课程：

SELECT \* FROM SC WHERE Cno = (SELECT Cno FROM Course WHERE Cname = '数据库');

DELETE FROM SC WHERE Cno = (SELECT Cno FROM Course WHERE Cname = '数据库');

DELETE FROM Course WHERE Cname = '数据库';

删除“张立”的所有选课信息：

sql

Copy code

DELETE FROM SC

WHERE Sno = '201215124';

将所有学生的选课成绩置为0：

UPDATE SC

SET Grade = 0;

将“数据处理”课程名改为“数据分析与处理”：

UPDATE Course

SET Cname = '数据分析与处理'

WHERE Cname = '数据处理';

将“操作系统”课程的学分修改为4.5学分：

UPDATE Course

SET Ccredit = 4.5

WHERE Cname = '操作系统';