实验报告 5 参考答案

问题：

1．用 SQL 语句（create database）创建一个 MT+"学号"的数据库（参考帮助文档）。

2．用 SQL 语句建立所有基本表

-- 本次作业主要参考是王家辉同学的代码，请大家相互学习

```sql
create database MT10130001

use MT10130001


create table department(
    dept_no char(2) primary key,
    dept_name char(10)
)

create table class(
    class_no char(5) primary key,
    class_name char(10) not null,
    dept_no char(2),
    FOREIGN KEY (dept_no) REFERENCES department(dept_no)
)

create table student(
    s_no char(6) primary key,
    s_name char(10) not null,
    s_sex char(2) check (s_sex='男' or s_sex='女'),
    s_birthday date,
    s_score numeric(5,1) CHECK (s_score>=0 and s_score<=100),
    s_addf numeric(3,1) CHECK (s_addf>=0 and s_addf<=30),
    class_no char(5),
    FOREIGN KEY (class_no) REFERENCES class(class_no)
)

create table course(
    course_no char(5) primary key,
    course_name char(20) not null
)
```

```sql
create table teacher(
    t_no char(6) primary key,
    t_name char(8) not null,
    t_sex char(2) check (t_sex='男' or t_sex='女'),
    t_birthday date,
    teach_title char(10) check (teach_title in ('助教','讲师','副教授','教授'))
)

create table choice(
    s_no char(6) ,
    course_no char(5),
    score numeric(5,1) CHECK (score>=0 and score<=100),
    FOREIGN KEY (course_no) REFERENCES course(course_no),
    FOREIGN KEY (s_no) REFERENCES student(s_no) on delete cascade,
    primary key(s_no,course_no)
)

create table teaching(
    t_no char(6),
    course_no char(5),
    FOREIGN KEY (course_no) REFERENCES course(course_no),
    FOREIGN KEY (t_no) REFERENCES teacher(t_no) on delete cascade,
    primary key(t_no,course_no)
)

insert into department values
    ('1','数学系'),
    ('2','物理系')

insert into class values
    ('001','数131','1'),
    ('002','数133','1'),
    ('003','信计130','1'),
    ('004','应物130','2'),
    ('005','光电131','2'),
    ('006','光电132','2')

insert into student values
    ('2405','王家辉','男','1995-04-28',100,30,'001'),
    ('2406','张三','男','1995-01-28',80,30,'001'),
    ('2407','李四','女','1995-01-28',80,30,'004')
insert into course values
    ('101','数据库'),
    ('102','数据结构')
```

```sql
insert into teacher values
    ('3001','张三','男','1980-01-01','讲师')

insert into choice values
    ('2405','101',100),
    ('2405','102',100),
    ('2406','101',80)

insert into teaching values
    ('3001','101'),
    ('3001','102')
```