作业 4

1、切换到 student_course 键空间

2、创建 students 表和 courses 表，表名前要加前缀，格式为姓名的第一个字母

```
cqlsh> describe keyspaces

student_course   system_auth   messagedb
system_schema    system        system_distributed

cqlsh> use student_course
    ... ;
cqlsh:student_course> create table zkx_students(
                  ... sno text primary key,
                  ... sname text,
                  ... ssex text,
                  ... sage int,
                  ... major map<text,int>,
                  ... dname text);
cqlsh:student_course> create table zkx_courses(
                  ... cno text primary key,
                  ... cname text,
                  ... pre_cno text,
                  ... credits int);
```

3、在 2 个表中分别插入行数据（按照基本表中给出的数据）

插入 zkx_students：

```
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,major,dname)values
                ... ('S01','Wang Jianping',21,'Male',{'C01':92, 'C03':84},'Automatic');
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,major,dname)values ('S02','Li Hua',19,'Female',{'C01':90, 'C02':94, 'C03':82},'Automatic');
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,major,dname)values ('S03','FanLinjun',18,'Female',{'C01':72, 'C02':90},'Computer');
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,major,dname)values ('S04','Li Wei',19,'Male',{'C03':75},'Mathematic');
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,major,dname)values ('S05','Huang He',18,'Male','Mathematic');
InvalidRequest: Error from server: code=2200 [Invalid query] message="Unmatched column names/values"
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,dname)values ('S05','Huang He',18,'Male','Mathematic');
cqlsh:student_course> insert into zkx_students(sno,sname,sage,ssex,dname)values ('S06','Chang Jiang',20,'Male','Mathematic');
cqlsh:student_course>
```

插入 zkx_courses：

```
cqlsh:student_course> insert into zkx_courses(cno,cname,pre_cno,credits)
                ... values('C01','English',Null,4)
                ...
cqlsh:student_course> insert into zkx_courses(cno,cname,pre_cno,credits) values('C02','Data Structure','C01',2);
cqlsh:student_course> insert into zkx_courses(cno,cname,pre_cno,credits) values('C03','Data Base','C02',2);
cqlsh:student_course>
```

4、在 Students 表的 Sname 和 major 列上分别创建索引

```
cqlsh:student_course> create index sname_index on zkx_students(sname);
cqlsh:student_course> create index major_index on zkx_students(major);
cqlsh:student_course>
```

5、查询学生姓名是'wangjianping'的选修课信息

6、查询年龄超过 20 岁的学生信息及其选修课信息

```
cqlsh:student_course> select sno,sname,major from zkx_students where sname='Wang Jianping';
```

sno	sname	major
S01	Wang Jianping	{'C01' : 92, 'C03' : 84}

(1 rows)

```
cqlsh:student_course> select * from zkx_students where sage>20 allow filtering;
```

sno	dname	major	sage	sname	ssex
S01	Automatic	{'C01' : 92, 'C02' : 84}	21	Wang Jianping	Male

(1 rows)