# Experiment 1 Creating and managing the database

## 1. Experimental objectives

1）Be familiar with the window of SQL Server Management Studio.

2）Master the method of creating database.

3）Master the methods of managing databases.

## 2. Experimental environment

SQL Server 2008

## 3. Experimental key points

1）Activate SQL Server Management Studio window.

2）Create a new database named XSCJ.

3）Modify the XSCJ database.

## 4. Experimental content

1）Open the ‘SQL Server Management Studio’ window, expand the server in the ‘Object Explorer’, then right-click the ‘Database’ node, click the ‘New Database’ command, finally, the ‘New Database’ dialog box will appear.

2）After entering the database ‘XSCJ’ in the ‘Database Name’ box of the ‘New Database’ dialog box, you can create a database with the default size by clicking the ‘OK’ button.

3）Right-click the ‘XSCJ’ database, and select the ‘Properties’ command in the pop-up shortcut menu, the ‘Database Properties’ dialog box will appear.

4）You can add or delete database files by click the ‘File’ tab, and click the ‘OK’ button to complete the database modification.

## Experiment 2 Creating table and entering data

### 1. Experimental objectives

1) Be familiar with the operation of creating data tables.

2) Master the operation of creating data tables.

3) Master the operation of data input and modification.

### 2. Experimental environment

SQL Server 2008

### 3. Experimental key points

1）Create student status table XSQK, class schedule table KC, and the relationship between student and class XS_KC in the XSCJ database, and the structure of those tables are shown in tables 2-1, 2-2 and 2-3.

Table 2-1 XSQK

| Column name | Data type | NULL or not | Default | Constraint |
|---|---|---|---|---|
| stu_id | Char(6) | NOT NULL | | Primary key |
| sname | Char(8) | NOT NULL | | unique |
| gender | char(1) | NOT NULL | 1 | 0 or 1 |
| birthday | datetime(4) | NOT NULL | | |
| department | Char(10) | NOT NULL | | |
| major | Char(10) | NOT NULL | | |
| phone | Char(11) | | | 11 digitals |
| total_credits | Tinyint(1) | | | 0~200 |
| remarks | Text(20) | | | |

Table 2-2 KC

| Column name | Data type | NULL or not | Default | identifier | Constraint |
|---|---|---|---|---|---|
| serial_num | Int(4) | | | The initial value is incremented by 1 | |
| course_id | Char(3) | NOT NULL | | | Primary key |

| | | | | | |
|---|---|---|---|---|---|
| cname | Char(20) | NOT NULL | | | |
| teacher | Char(8) | | | | |
| semester | Tinyint(1) | NOT NULL | 1 | | 1~6 |
| class_hour | Tinyint(1) | | | | |
| credit | Tinyint(1) | | | | |

Table 2-3 XS-KC

| Column name | Data type | NULL or not | Default | Constraint | |
|---|---|---|---|---|---|
| stu_id | Char(6) | NOT NULL | | Foreign key, referenced from XSQK | Primary key |
| course_id | Char(3) | NOT NULL | | Foreign key, referenced from KC | |
| score | Tinyint(1) | | | 0~100 | |
| credit | Tinyint(1) | | | | |

2）Input data into the XSQK, KC and XS_KC tables respectively, the content of which is customized by the user.

**3. Experimental content**

1）Open ‘SQL server Management Studio’ window，click on the ‘New Query’ button in the ‘standard’ toolbar, and the interface as shown in the figure will appear.

2）In the ‘SQL Editor’ toolbar, click the drop-down button on the right side of ‘Available Database’ to switch the current database to ‘XSCJ’ database.

3）In the query window, input the query statements of creating tables.

4）In the ‘Object Explorer’, unfold the database ‘XSCJ’, right-click the ‘table’ node, and click the ‘refresh’ command in the pop-up shortcut menu, you can see the 3

tables that have been created above.

5）Right-click each table and chose the ‘create the first 200 rows’ command in the drop-down menu, and input data for each table, note the input order of the three tables.