

# DASC 5333 Database Systems for Data Science CSCI 4333 Design of Database Systems Spring 2023 Homework #2 Simple SQL

Install the database toyu in your MySQL by [executing the sql file](#): createtoyu.sql.txt (saving as createtoyu.sql) in MySQL console. You may use the command:

```
mysql> source C:\...youthere...\Createtoyu.sql
```

Provide the MySQL commands for the following queries. Make sure that your queries produce the exact output as shown (row order can be different).

[1] List information of all classes of CSCI and CINF courses in the following manner.

```
+-----+-----+-----+-----+-----+-----+
| rubric | number | title                               | classId | facId | year | semester |
+-----+-----+-----+-----+-----+-----+
| CSCI   | 3333   | Data Structures                     | 10000   | 1011 | 2019 | Fall     |
| CSCI   | 3333   | Data Structures                     | 11000   | 1011 | 2020 | Spring   |
| CSCI   | 4333   | Design of Database Systems          | 10001   | 1011 | 2019 | Fall     |
| CSCI   | 4333   | Design of Database Systems          | 11001   | 1012 | 2020 | Spring   |
| CSCI   | 5333   | DBMS                               | 10002   | 1012 | 2019 | Fall     |
| CSCI   | 5333   | DBMS                               | 11002   | 1013 | 2020 | Spring   |
| CINF   | 3321   | Introduction to Information Systems | 10003   | 1014 | 2019 | Fall     |
| CINF   | 3321   | Introduction to Information Systems | 11003   | 1016 | 2020 | Spring   |
| CINF   | 4320   | Web Application Development         | 10004   | 1014 | 2019 | Fall     |
+-----+-----+-----+-----+-----+-----+
9 rows in set (0.001 sec)
```

[2] List information of all classes taught by a CSCI faculty in the following manner.

```
+-----+-----+-----+-----+-----+
| course | title                               | classId | facId | instructor dept |
+-----+-----+-----+-----+-----+
| CSCI 3333 | Data Structures                     | 10000   | 1011 | CSCI             |
| CSCI 4333 | Design of Database Systems          | 10001   | 1011 | CSCI             |
| CSCI 3333 | Data Structures                     | 11000   | 1011 | CSCI             |
| CSCI 5333 | DBMS                               | 10002   | 1012 | CSCI             |
| CSCI 4333 | Design of Database Systems          | 11001   | 1012 | CSCI             |
| CSCI 5333 | DBMS                               | 11002   | 1013 | CSCI             |
| CINF 3321 | Introduction to Information Systems | 10003   | 1014 | CSCI             |
| CINF 4320 | Web Application Development         | 10004   | 1014 | CSCI             |
+-----+-----+-----+-----+-----+
8 rows in set (0.000 sec)
```

[3] Show the information of students who are majoring or minoring in CSCI in the following manner. The status of a student is dependent on the number of ach credits:

1. 0-60: lower
2. 61-90: junior
3. >90: senior

```
+-----+-----+-----+-----+-----+
| stuId | fname | lname | major | minor | Accumulated credits | status |
+-----+-----+-----+-----+-----+-----+

```

```

| 100000 | Tony | Hawk | CSCI | CINF | 40 | lower |
| 100001 | Mary | Hawk | CSCI | CINF | 35 | lower |
| 100002 | David | Hawk | CSCI | ITEC | 66 | junior |
| 100009 | Linda | King | ARTS | CSCI | 125 | senior |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.000 sec)

```

[4] List the information about the class every student taken without a grade in the following manner

```

+-----+-----+-----+-----+-----+
| stuId | fname | lname | classId | grade |
+-----+-----+-----+-----+
| 100001 | Mary | Hawk | 10000 | NULL |
| 100005 | Linda | Johnson | 10003 | NULL |
+-----+-----+-----+-----+
2 rows in set (0.001 sec)

```

[5] List the information about the class every student taken without a passing grade (either no grade, or a grade below C-, that is a grade point of the course is below 1.5.)

```

+-----+-----+-----+-----+-----+
| stuId | fname | lname | classId | grade |
+-----+-----+-----+-----+
| 100000 | Tony | Hawk | 11001 | D |
| 100001 | Mary | Hawk | 10000 | NULL |
| 100002 | David | Hawk | 10003 | D |
| 100005 | Linda | Johnson | 10003 | NULL |
| 100007 | Ben | Zico | 10007 | F |
+-----+-----+-----+-----+
5 rows in set (0.001 sec)

```

[6] List the students and the courses they enrolled into in the following manner. List only students with both declared major and minor.

```

+-----+-----+-----+-----+-----+-----+-----+
| stuId | major | minor | classId | course | offered by | grade |
+-----+-----+-----+-----+-----+-----+-----+
| 100000 | CSCI | CINF | 10000 | Data Structures | Computer Science | A |
| 100000 | CSCI | CINF | 10001 | Design of Database Systems | Computer Science | A |
| 100000 | CSCI | CINF | 10002 | DBMS | Computer Science | B+ |
| 100000 | CSCI | CINF | 10003 | Introduction to Information Systems | Computer Information Systems | C |
| 100000 | CSCI | CINF | 10004 | Web Application Development | Computer Information Systems | A- |
| 100000 | CSCI | CINF | 11001 | Design of Database Systems | Computer Science | D |
| 100001 | CSCI | CINF | 10000 | Data Structures | Computer Science | NULL |
| 100001 | CSCI | CINF | 10001 | Design of Database Systems | Computer Science | A- |
| 100002 | CSCI | ITEC | 10000 | Data Structures | Computer Science | B- |
| 100002 | CSCI | ITEC | 10002 | DBMS | Computer Science | B+ |
| 100002 | CSCI | ITEC | 10003 | Introduction to Information Systems | Computer Information Systems | D |
| 100005 | CINF | ENGL | 10003 | Introduction to Information Systems | Computer Information Systems | NULL |
| 100005 | CINF | ENGL | 10004 | Web Application Development | Computer Information Systems | A- |
| 100005 | CINF | ENGL | 10005 | Database Development | Information Technology | A- |
| 100005 | CINF | ENGL | 10006 | Introduction to Scripting | Information Technology | B+ |
| 100006 | CINF | ITEC | 10004 | Web Application Development | Computer Information Systems | C+ |
| 100006 | CINF | ITEC | 10005 | Database Development | Information Technology | A |
+-----+-----+-----+-----+-----+-----+-----+
17 rows in set (0.001 sec)

```

The solution should be put in an executable .sql file. Name the file: CSCI4333\_S<<Section Number>>\_H2\_<<Your name>>\_<<Your Student ID>>.<<extension>. Replace 'CSCI4333' by 'DASC533' if needed. Submit your homework through Blackboard. Add the extension .txt if needed for submission.