

DASC 5333 Database Systems for Data Science
CSCI 4333 Design of Database Systems
Spring 2024
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 the stuId, names and credits of students majoring in CSCI and have 30 to 60 credits (ach) in the following format.

```
+-----+-----+-----+-----+
| stuId | fname | lname | credits |
+-----+-----+-----+-----+
| 100000 | Tony  | Hawk  | 40      |
| 100001 | Mary  | Hawk  | 35      |
+-----+-----+-----+-----+
2 rows in set (0.001 sec)
```

[2] List the student names of minoring in CINF or ITEC with classes (classId) and grades they have taken in the following manner.

```
+-----+-----+-----+-----+
| fname | lname | classId | grade |
+-----+-----+-----+-----+
| Tony  | Hawk  | 10000   | A      |
| Tony  | Hawk  | 10001   | A      |
| Tony  | Hawk  | 10002   | B+     |
| Tony  | Hawk  | 10003   | C      |
| Tony  | Hawk  | 10004   | A-     |
| Tony  | Hawk  | 11001   | D      |
| Mary  | Hawk  | 10000   | NULL   |
| Mary  | Hawk  | 10001   | A-     |
| David | Hawk  | 10000   | B-     |
| David | Hawk  | 10002   | B+     |
| David | Hawk  | 10003   | D      |
| Lillian | Johnson | 10004   | C+     |
| Lillian | Johnson | 10005   | A      |
+-----+-----+-----+-----+
13 rows in set (0.001 sec)
```

[3] Repeat (b) but also list the course names in the following manner. Further, if a grade is missing, show an empty string.

```
+-----+-----+-----+-----+-----+-----+
| fname | lname | classId | Course Title                                     | grade |
+-----+-----+-----+-----+-----+-----+
| Tony  | Hawk  | 10000   | Data Structures                               | A      |
| Tony  | Hawk  | 10001   | Design of Database Systems                   | A      |
| Tony  | Hawk  | 10002   | DBMS                                         | B+     |
| Tony  | Hawk  | 10003   | Introduction to Information Systems          | C      |
| Tony  | Hawk  | 10004   | Web Application Development                 | A-     |
| Tony  | Hawk  | 11001   | Design of Database Systems                   | D      |
| Mary  | Hawk  | 10000   | Data Structures                               |        |
| Mary  | Hawk  | 10001   | Design of Database Systems                   | A-     |
| David | Hawk  | 10000   | Data Structures                               | B-     |
+-----+-----+-----+-----+-----+-----+
```

```

| David | Hawk | 10002 | DBMS | B+ |
| David | Hawk | 10003 | Introduction to Information Systems | D |
| Lillian | Johnson | 10004 | Web Application Development | C+ |
| Lillian | Johnson | 10005 | Database Development | A |
+-----+-----+-----+-----+-----+
13 rows in set (0.001 sec)

```

[4] Repeat (c) in the following manner. Add a column to show the name of the instructor.

```

+-----+-----+-----+-----+-----+
| student | classId | Course Title | instructor | grade |
+-----+-----+-----+-----+-----+
| Tony Hawk | 10000 | Data Structures | Paul Smith | A |
| Tony Hawk | 10001 | Design of Database Systems | Paul Smith | A |
| Tony Hawk | 10002 | DBMS | Mary Tran | B+ |
| Tony Hawk | 10003 | Introduction to Information Systems | Sharon Mannes | C |
| Tony Hawk | 10004 | Web Application Development | Sharon Mannes | A- |
| Tony Hawk | 11001 | Design of Database Systems | Mary Tran | D |
| Mary Hawk | 10000 | Data Structures | Paul Smith | |
| Mary Hawk | 10001 | Design of Database Systems | Paul Smith | A- |
| David Hawk | 10000 | Data Structures | Paul Smith | B- |
| David Hawk | 10002 | DBMS | Mary Tran | B+ |
| David Hawk | 10003 | Introduction to Information Systems | Sharon Mannes | D |
| Lillian Johnson | 10004 | Web Application Development | Sharon Mannes | C+ |
| Lillian Johnson | 10005 | Database Development | Daniel Kim | A |
+-----+-----+-----+-----+-----+
13 rows in set (0.002 sec)

```

[5] List all student names, with their major department names and their faculty advisor names in the following manner. Only include students who have [1] a declared minor, [2] a faculty advisor, and [3] enrolled in at least one classes.

```

+-----+-----+-----+-----+
| student | major | advsior |
+-----+-----+-----+
| Tony Hawk | Computer Science | Paul Smith |
| Mary Hawk | Computer Science | Paul Smith |
| David Hawk | Computer Science | Mary Tran |
| Linda Johnson | Computer Information Systems | Daniel Kim |
| Lillian Johnson | Computer Information Systems | Andrew Byre |
+-----+-----+-----+
5 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. For example: DASC_S1_H2_Smith_Mary.sql.txt. Submit your homework through Canvas. Add the extension .txt if needed for submission.