

DASC 5333 Database Systems for Data Science CSCI 4333 Design of Database Systems Fall 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] Show the stuId, name, major, and minor of all students who are majoring in neither CSCI nor CINF.

```
+-----+-----+-----+-----+
| stuId | name           | major | minor |
+-----+-----+-----+-----+
| 100003 | Catherine Lim  | ITEC  | CINF  |
| 100004 | Larry Johnson  | ITEC  | NULL  |
| 100008 | Bill Ching     | ARTS  | NULL  |
| 100009 | Linda King     | ARTS  | CSCI  |
+-----+-----+-----+-----+
4 rows in set
```

[2] List the names of all departments together with their faculty members' names and ranks of the School 'Science and Engineering' in the following format. You should not use 'CSE' in your query.

```
+-----+-----+-----+
| faculty | rank           | department |
+-----+-----+-----+
| Paul Smith | Professor      | Computer Science |
| Mary Tran  | Associate Professor | Computer Science |
| David Love | NULL          | Computer Science |
| Sharon Mannes | Assistant Professor | Computer Science |
| Daniel Kim | Professor      | Computer Information Systems |
| Andrew Byre | Associate Professor | Computer Information Systems |
| Deborah Gump | Professor      | Information Technology |
| Benjamin Yu | Lecturer       | Information Technology |
+-----+-----+-----+
8 rows in set
```

[3] List the names of students, and their grades of all enrolled 'ENGL', 'CSCI' and 'ITEC' classes, together with the students' grades, semesters and years of the classes, and the course names in the following manner. Note that the result is shown in the ascending order of the student names and then course names.

```
+-----+-----+-----+-----+-----+-----+-----+
| stuId | student        | rubric | number | title                | semester | year | grade |
+-----+-----+-----+-----+-----+-----+-----+
| 100007 | Ben Zico       | ENGL  | 1410  | English I            | Fall    | 2019 | F    |
| 100008 | Bill Ching     | ENGL  | 1410  | English I            | Fall    | 2019 | C-   |
| 100002 | David Hawk     | CSCI  | 3333  | Data Structures     | Fall    | 2019 | B-   |
| 100002 | David Hawk     | CSCI  | 5333  | DBMS                 | Fall    | 2019 | B+   |
| 100006 | Lillian Johnson | ITEC  | 3335  | Database Development | Fall    | 2019 | A    |
| 100005 | Linda Johnson  | ITEC  | 3335  | Database Development | Fall    | 2019 | A-   |
+-----+-----+-----+-----+-----+-----+-----+
```

```

| 100005 | Linda Johnson | ITEC | 3312 | Introduction to Scripting | Fall | 2019 | B+ |
| 100001 | Mary Hawk | CSCI | 3333 | Data Structures | Fall | 2019 | NULL |
| 100001 | Mary Hawk | CSCI | 4333 | Design of Database Systems | Fall | 2019 | A- |
| 100000 | Tony Hawk | CSCI | 3333 | Data Structures | Fall | 2019 | A |
| 100000 | Tony Hawk | CSCI | 5333 | DBMS | Fall | 2019 | B+ |
| 100000 | Tony Hawk | CSCI | 4333 | Design of Database Systems | Fall | 2019 | A |
| 100000 | Tony Hawk | CSCI | 4333 | Design of Database Systems | Spring | 2020 | D |
+-----+-----+-----+-----+-----+-----+-----+-----+
13 rows in set

```

[4] List the ids, names, major names and faculty advisor name of every student in the following manner.

```

+-----+-----+-----+-----+
| stuId | student | major | advisor |
+-----+-----+-----+-----+
| 100000 | Tony Hawk | Computer Science | Paul Smith |
| 100001 | Mary Hawk | Computer Science | Paul Smith |
| 100002 | David Hawk | Computer Science | Mary Tran |
| 100003 | Catherine Lim | Information Technology | NULL |
| 100004 | Larry Johnson | Information Technology | Deborah Gump |
| 100005 | Linda Johnson | Computer Information Systems | Daniel Kim |
| 100006 | Lillian Johnson | Computer Information Systems | Andrew Byre |
| 100007 | Ben Zico | NULL | NULL |
| 100008 | Bill Ching | Arts | NULL |
| 100009 | Linda King | Arts | Art Allister |
| 100111 | Cathy Johanson | NULL | Art Allister |
+-----+-----+-----+-----+
11 rows in set

```

[5] List the ids, names and major names of all students with a declared major but no declared minor in the following manner.

```

+-----+-----+-----+
| stuId | student | major |
+-----+-----+-----+
| 100004 | Larry Johnson | Information Technology |
| 100008 | Bill Ching | Arts |
+-----+-----+-----+
2 rows in set

```

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 Blackboard. Add the extension .txt if needed for submission.