DASC 5333 Database Systems for Data Science
CSCI 4333 Design of Database Systems
Spring 2025
Homework #1 Simple SQL

This assignment uses the toyu database in MySQL or MariaDB:
https://dcm.uhcl.edu/yue/courses/joinDB/spring2025/notes/toyu/toyu.html.

Provide the MySQL queries for the following queries. Make sure that your queries produce the exact output as shown below. Nevertheless, row orders can be different.

The solution should be put in an executable .sql file named h1.sql. Submit your homework through Canvas.

[1] List the stuId, names, and majors of students minoring in ITEC and having 1016 as their faculty advisors in the following manner.

```
+--------+----------------+-----------------------------+
| stuId  | student        | major                       |
+--------+----------------+-----------------------------+
| 100006 | Lillian Johnson | Computer Information Systems |
+--------+----------------+-----------------------------+
1 row in set
```

[2] List the names, numbers of credits (ach), majors, and advisor names of students having 1011, 1012 or 1015 as faculty advisor in the following manner.

```
+--------+---------------+---------+-----------------------------+------------+
| stuId  | student       | credits | major                       | advisor    |
+--------+---------------+---------+-----------------------------+------------+
| 100000 | Tony Hawk     |      40 | Computer Science            | Paul Smith |
| 100001 | Mary Hawk     |      35 | Computer Science            | Paul Smith |
| 100002 | David Hawk    |      66 | Computer Science            | Mary Tran  |
| 100005 | Linda Johnson |      13 | Computer Information Systems | Daniel Kim |
+--------+---------------+---------+-----------------------------+------------+
4 rows in set
```

[3] List the enrollment information of all CSCI courses that have been offered in the following manner.

```
+-----------+----------------------------+---------+----------+------+------------+------------+-------+
| course id | course                     | credits | semester | year | instructor | student    | grade |
+-----------+----------------------------+---------+----------+------+------------+------------+-------+
| CSCI 3333 | Data Structures            |       3 | Fall     | 2019 | Paul Smith | Tony Hawk  | A     |
| CSCI 3333 | Data Structures            |       3 | Fall     | 2019 | Paul Smith | Mary Hawk  | NULL  |
| CSCI 3333 | Data Structures            |       3 | Fall     | 2019 | Paul Smith | David Hawk | B-    |
| CSCI 4333 | Design of Database Systems |       3 | Fall     | 2019 | Paul Smith | Tony Hawk  | A     |
| CSCI 4333 | Design of Database Systems |       3 | Fall     | 2019 | Paul Smith | Mary Hawk  | A-    |
| CSCI 4333 | Design of Database Systems |       3 | Spring   | 2020 | Mary Tran  | Tony Hawk  | D     |
| CSCI 5333 | DBMS                       |       3 | Fall     | 2019 | Mary Tran  | Tony Hawk  | B+    |
| CSCI 5333 | DBMS                       |       3 | Fall     | 2019 | Mary Tran  | David Hawk | B+    |
+-----------+----------------------------+---------+----------+------+------------+------------+-------+
8 rows in set
```

[4] Repeat [3], show only those entries with a grade of B or above.

```
+-----------+----------------------------+---------+----------+------+------------+------------+-------+
| course id | course                     | credits | semester | year | instructor | student    | grade |
+-----------+----------------------------+---------+----------+------+------------+------------+-------+
```

```
| CSCI 3333 | Data Structures            |        3 | Fall     | 2019 | Paul Smith | Tony Hawk  | A    |
| CSCI 4333 | Design of Database Systems |        3 | Fall     | 2019 | Paul Smith | Tony Hawk  | A    |
| CSCI 4333 | Design of Database Systems |        3 | Fall     | 2019 | Paul Smith | Mary Hawk  | A-   |
| CSCI 5333 | DBMS                       |        3 | Fall     | 2019 | Mary Tran  | Tony Hawk  | B+   |
| CSCI 5333 | DBMS                       |        3 | Fall     | 2019 | Mary Tran  | David Hawk | B+   |
+-----------+----------------------------+----------+----------+------+------------+------------+------+
5 rows in set
```

[5] List the names and ids of all students who have a failing grade (C- or below) or no grade in some courses in the following manner.

```
+----------------------------------------+------------+
| student with failing grades or no grade | student id |
+----------------------------------------+------------+
| Mary Hawk                              |     100001 |
| Linda Johnson                          |     100005 |
| Bill Ching                             |     100008 |
| David Hawk                             |     100002 |
| Tony Hawk                              |     100000 |
| Ben Zico                               |     100007 |
+----------------------------------------+------------+
6 rows in set
```