DASC 5333 Database Systems for Data Science
CSCI 4333 Design of Database Systems
Fall 2023
Homework #1 MS Access

(1) **Establishing EMail Communication with TA and Photos.** Send an email to the TA (rajue4545@uhcl.edu). The subject heading should be <<class_section>>;H1;<<Your name>>;<<Your Student ID>>,<<Your major>>. For example:
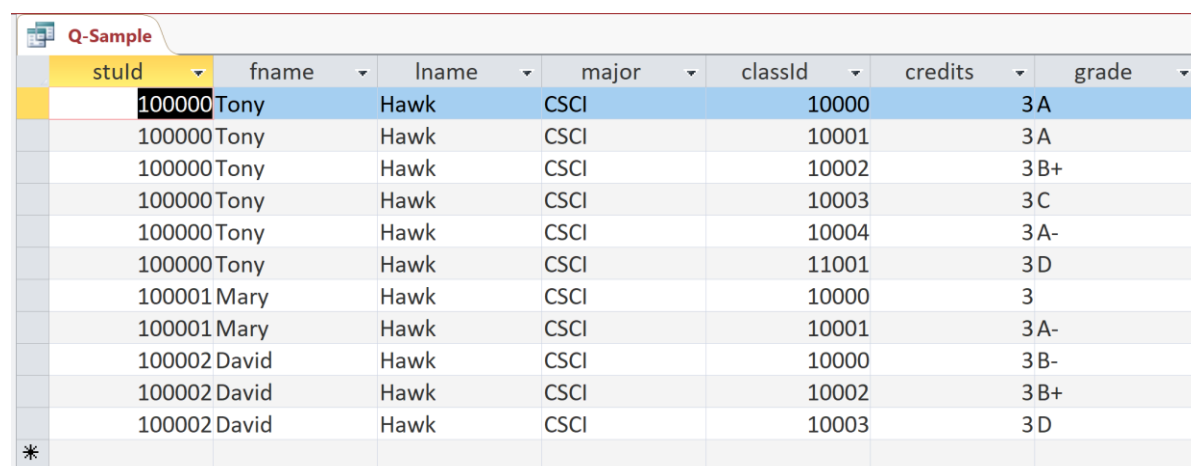
Subject: CSCI4333.1;H1;Jane Smith;0011098;CS

In the email, please attach a recent photo of high quality of yourself of *exactly* 300-pixel width and 450-pixel height. It should be similar to a *passport* photo, with mostly only you in the photo. The image format should be either jpeg, gif or png.

Make sure that you use an email address that your frequently check in your communications with the TA and the instructor, whenever possible. Do *not* copy your email or homework to the instructor. This is to establish a communication channel between you and the TA, and helping us to better communicate with you. *Thank you*.

(2) **Simple Access Query.** Use the Toy University DB in Access: toyu.accdb. Show *the screen captures* of the *query designs*.

[Sample question] So you can have some ideas what a suggested solution should look like. You may also look at questions and answers from past semesters.
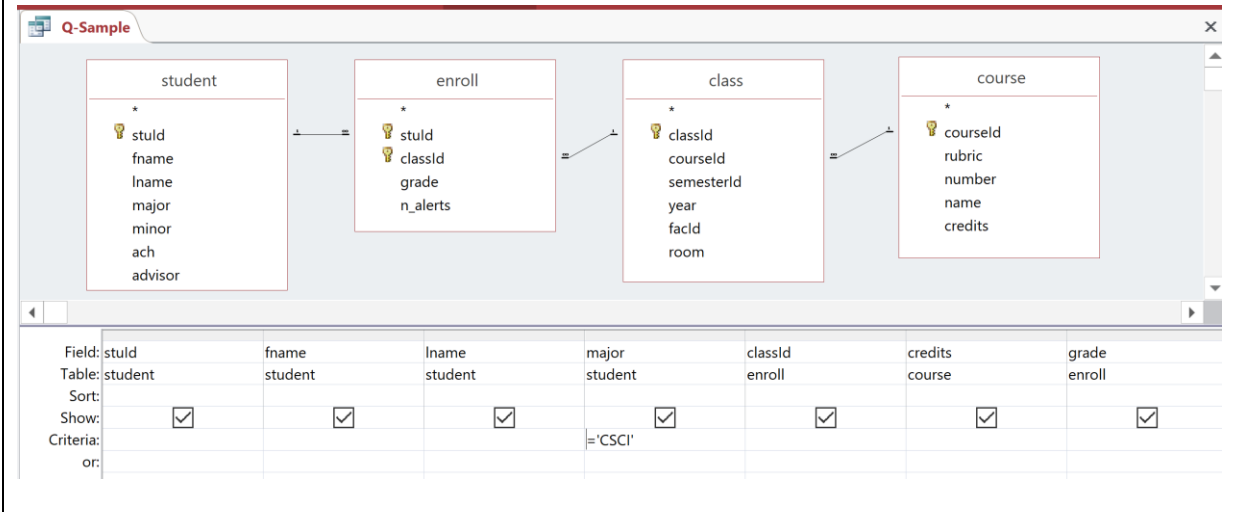
Q-Sample. Show the student id, fname, lname, major, class enrolled, credit of class and grade of class of every 'CSCI' major in the following manner. The result:

stuId	fname	lname	major	classId	credits	grade
100000	Tony	Hawk	CSCI	10000	3	A
100000	Tony	Hawk	CSCI	10001	3	A
100000	Tony	Hawk	CSCI	10002	3	B+
100000	Tony	Hawk	CSCI	10003	3	C
100000	Tony	Hawk	CSCI	10004	3	A-
100000	Tony	Hawk	CSCI	11001	3	D
100001	Mary	Hawk	CSCI	10000	3	
100001	Mary	Hawk	CSCI	10001	3	A-
100002	David	Hawk	CSCI	10000	3	B-
100002	David	Hawk	CSCI	10002	3	B+
100002	David	Hawk	CSCI	10003	3	D

Questions: (Collect your solutions of screenshots in a single MS words file and submit it through blackboard. If you are not sure what the format should be, refer to the suggested solution of the same homework #1 in previous semesters.)

(a) Show the stuId, names and advisorId of all students in the following format. The result:

(b) Modify question (a) to show only students with declared minors. Also add a column to show the names of the faculty advisors of students. The result:

Query2

stuld	student	major	advisorId	advisor
100000	Tony Hawk	CSCI	1011	Paul Smith
100001	Mary Hawk	CSCI	1011	Paul Smith
100002	David Hawk	CSCI	1011	Paul Smith
100003	Catherine Lim	ITEC	1017	Deborah Gump
100005	Linda Johnson	CINF	1015	Daniel Kim
100006	Lillian Johnson	CINF	1015	Daniel Kim
100008	Bill Ching	ARTS	1018	Art Allister
100009	Linda King	ARTS	1018	Art Allister

These students have declared minors.

Names of advisors are also shown in the result.

(c)   Show the id and names of students who have received a grade of A or A- in a CSCI courses in the following format. The result:

Query3

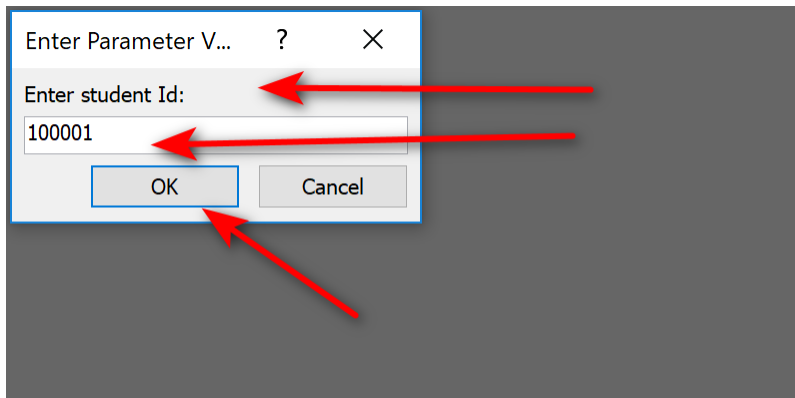| stuld	student
100000	Tony Hawk
100001	Mary Hawk

Only Tony Hawk and Mary Hawk have a grade of A or A- in some CSCI courses.

Note that Tony Hawk and Mary Hawk are the only students who have a grade of A or A- in some CSCI courses:

stuld	student	grade	rubric	number
100000	Tony Hawk	A	CSCI	3333
100000	Tony Hawk	A	CSCI	4333
100001	Mary Hawk	A-	CSCI	4333

Tips: you may need to change the property of the MS Access Query to show only distinct values.
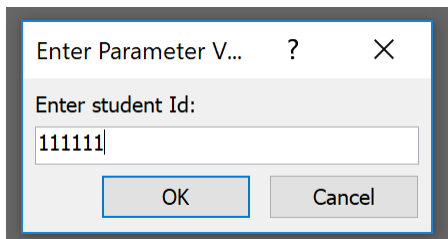
(d)   Executing your query shows a prompt window for a student id:

After the user entered the student id and hit the ok button, it returns information about all classes of the student:
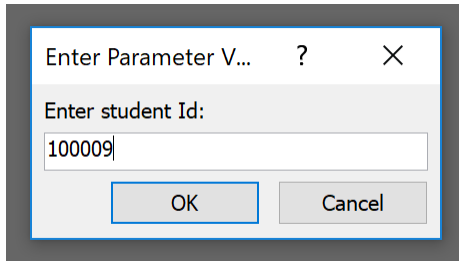

If the student id does not exist, it returns no result.

If the student id exists in the database, but the student has not enrolled in any class, it returns only the student id and name.

Hints: you may use [] for field name or user-input parameter name in MS Access.

The solutions to Q2 should be put into a single MS words file, with proper description. Name the file using the convention as illustrated by this example: CSCI4333_<<Section>>_H1_<<Your name>>_<<Your Student ID>>.docx (e.g. CSCI4333_2_H1_JaneDoe_1234567.docx or DASC5333_1_JoeSmith_9876543.pdf). Submit your homework assignment through Blackboard (except question 1, in which you need to send an email to the TA.) PDF files are acceptance replacement of docx files. All homework should be submitted through Blackboard.