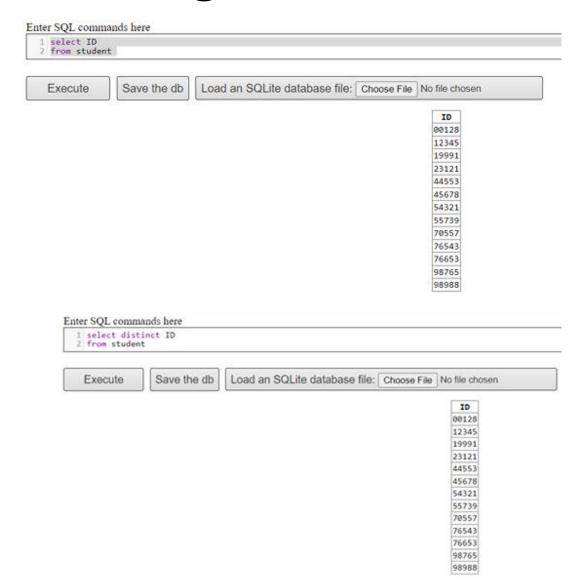
Assignment 3

Christina Lam

Write SQL code to get a list of Student IDs



Write SQL code to get a list of Instructors



name	ID
Srinivasan	10101
Wu	12121
Mozart	15151
Einstein	22222
El Said	32343
Gold	33456
Katz	45565
Califieri	58583
Singh	76543
Crick	76766
Brandt	83821
Kim	98345

Write SQL code to get a list of Departments

Enter SQL commands here

- 1 select dept_name, building
- 2 from department

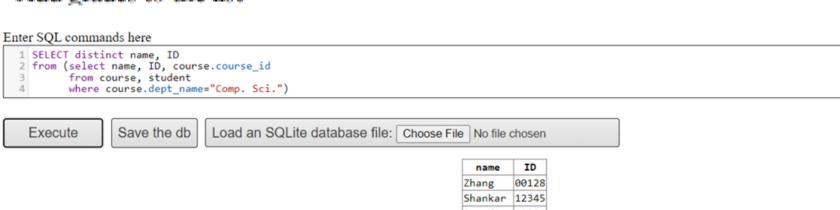
Execute

Save the db

Load an SQLite database file: Choose File No file chosen

dept_name	building
Biology	Watson
Comp. Sci.	Taylor
Elec. Eng.	Taylor
Finance	Painter
History	Painter
Music	Packard
Physics	Watson

- Find the ID and name of each student who has taken at least one Comp. Sci. course make sure there are no duplicate names in the result.
- ii. Add grades to the list



Zhang	00128
Shankar	12345
Brandt	19991
Chavez	23121
Peltier	44553
Levy	45678
Williams	54321
Sanchez	55739

Enter SQL commands here

- 1 select distinct student.ID, student.name, takes.grade
- 2 from student
- 3 join takes on student.ID=takes.ID
- 4 join course on takes.course_id=course.course_id
- 5 where course.dept_name= 'Comp. Sci.'

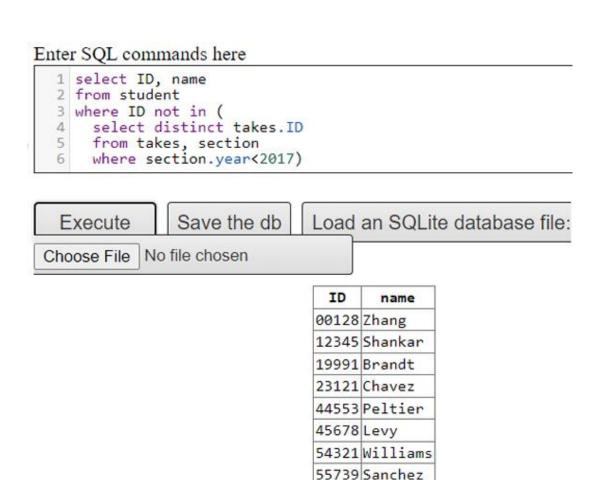
Execute

Save the db

Load an SQLite database file: Choose File No file chosen

ID	name	grade
00128	Zhang	A
00128	Zhang	Α-
12345	Shankar	c
12345	Shankar	A
45678	Levy	F
45678	Levy	B+
45678	Levy	В
54321	Williams	Α-
54321	Williams	B+
76543	Brown	A
98765	Bourikas	C-
98765	Bourikas	В

iii. Find the ID and name of each student who has not taken any course offered before 2017.



70557 Snow 76543 Brown 76653 Aoi

98765 Bourikas 98988 Tanaka

- For each department, find the maximum salary of instructors in that department. You
 may assume that every department has at least one instructor.
- Find the lowest, across all departments, of the per-department maximum salary computed by the preceding query.
- vi. Add names to the list

Enter SQL commands here

- 1 SELECT dept_name, max(salary) as max_salary, name
- 2 from instructor
- 3 group by dept_name

Execute

Save the db

Load an SQLite database file: Choose File No file chosen

dept_name	max_salary	name
Biology	72000	Crick
Comp. Sci.	92000	Brandt
Elec. Eng.	80000	Kim
Finance	90000	Wu
History	62000	Califieri
Music	40000	Mozart
Physics	95000	Einstein

Click here for tips on using SQLITE including SQL symax variations.

Original work by kripken (sol. is). C to Javascript compiler by kripk

Enter SQL commands here

- 1 select min(max_instructor_salary) as lowest_max_salary,name, dept_name
- 2 from(select dept_name, MAX(salary) as max_instructor_salary,name,dept_name
- 3 from instructor
- 4 group by dept_name)

Execute

Save the db

Load an SQLite database file: Choose File No file chosen

lowest_max_salary	name	dept_name
40000	Mozart	Music

Find instructor who has never given an A grade in any course taught

Execute Save the db Load an SQLite database file: Choose File No file chosen

ID	name
12121	Wu
15151	Mozart
22222	Einstein
32343	El Said
33456	Gold
58583	Califieri
76543	Singh
98345	Kim

Write SQL query to find number of students in each section

```
Enter SQL commands here
  1 SELECT section.course id,
            section.sec id,
            section.year,
           section.semester,
           COUNT(takes.ID) AS num
  7 Join takes on section.course id = takes.course id
                  AND section.sec_id = takes.sec_id
                  AND section.semester = takes.semester
                  AND section.year = takes.year
 11 GROUP BY section.course id, section.sec id, section.year, section.semester
 12 HAVING num > 0;
    Execute
                                  Load an SQLite database file: Choose File No file chosen
                  Save the db
                                                                  course id sec id year semester num
                                                                                  2017 Summer
                                                                  BIO-101
                                                                  BIO-301
                                                                                  2018 Summer
                                                                                  2017 Fall
                                                                  CS-101
                                                                           1
                                                                  CS-101
                                                                           1
                                                                                  2018 Spring
                                                                  CS-190
                                                                                  2017 Spring
                                                                  CS-315
                                                                                  2018 Spring
                                                                  CS-319
                                                                                  2018 Spring
                                                                  CS-319
                                                                                  2018 Spring
                                                                                  2017 Fall
                                                                  CS-347
                                                                  EE-181
                                                                                  2017 Spring
                                                                  FIN-201
                                                                           1
                                                                                  2018 Spring
                                                                  HIS-351
                                                                                  2018 Spring
                                                                  MU-199
                                                                                  2018 Spring
                                                                                  2017 Fall
                                                                  PHY-101
```