

EPPS 6354

ASSIGNMENT 3

Megan Pruitt

2. Student IDs, Instructors, Departments

Enter SQL commands here

```
1 SELECT id
2 FROM student
```

Enter SQL commands here

```
1 SELECT name
2 FROM instructor
```

Enter SQL commands here

```
1 SELECT dept_name
2 FROM department
```

ID
00128
12345
19991
23121
44553
45678
54321
55739
70557
76543
76653
98765
98988

name
Srinivasan
Wu
Mozart
Einstein
El Said
Gold
Katz
Califieri
Singh
Crick
Brandt
Kim

dept_name
Biology
Comp. Sci.
Elec. Eng.
Finance
History
Music
Physics

3i. Students who have taken at least one Comp. Sci. course

Enter SQL commands here

```
1 SELECT DISTINCT takes.ID, name
2 FROM takes, student, course
3 WHERE takes.ID = student.ID
4       AND takes.course_id = course.course_id
5       AND course.dept_name = 'Comp. Sci.'
```

Execute

Save the db

Load an SQLite database file: No file chosen

ID	name
00128	Zhang
12345	Shankar
45678	Levy
54321	Williams
76543	Brown
98765	Bourikas

3i. Students who have taken at least one Comp. Sci. course

Enter SQL commands here

```
1 SELECT DISTINCT takes.ID, name
2 FROM takes, student, course
3 WHERE takes.ID = student.ID
4 AND takes.course_id = course.course_id
5 AND course.dept_name = 'Comp. Sci.'
```

Execute

Save the db

Load an SQLite database file:

Choose File

No file chosen

ID	name
00128	Zhang
12345	Shankar
45678	Levy
54321	Williams
76543	Brown
98765	Bourikas

3ii. Add grades

Enter SQL commands here

```
1 SELECT takes.ID, name, takes.grade
2 FROM takes, student, course
3 WHERE takes.ID = student.ID
4 AND takes.course_id = course.course_id
5 AND course.dept_name = 'Comp. Sci.'
```

Execute

Save the db

Load an SQLite database file: No file chosen

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

3iii. Students who have not taken any course offered before 2017

Enter SQL commands here

```
1 SELECT DISTINCT student.ID, student.name
2 FROM student, takes
3 WHERE student.ID = takes.ID
4 AND takes.year >= 2017
```

Execute

Save the db

Load an SQLite database file:

Choose File

No file chosen

ID	name
00128	Zhang
12345	Shankar
19991	Brandt
23121	Chavez
44553	Peltier
45678	Levy
54321	Williams
55739	Sanchez
76543	Brown
76653	Aoi
98765	Bourikas
98988	Tanaka

3iv. Maximum salary by department

Enter SQL commands here

```
1 SELECT dept_name, max(salary)
2 FROM instructor
3 GROUP BY dept_name
```

Execute

Save the db

Load an SQLite database file: No file chosen

dept_name	max(salary)
Biology	72000
Comp. Sci.	92000
Elec. Eng.	80000
Finance	90000
History	62000
Music	40000
Physics	95000

3v. Lowest maximum salary, then add name

Enter SQL commands here

```
1 SELECT dept_name, max(salary)
2 FROM instructor
3 GROUP BY dept_name
4 ORDER BY max(salary)
5 LIMIT 1
```

Execute

Save the db

Load an SQLite database file: No file chosen

dept_name	max(salary)
Music	40000

Enter SQL commands here

```
1 SELECT name, dept_name, max(salary)
2 FROM instructor
3 GROUP BY dept_name
4 ORDER BY max(salary)
5 LIMIT 1
```

Execute

Save the db

Load an SQLite database file: No file chosen

name	dept_name	max(salary)
Mozart	Music	40000

5. Number of students per section

Enter SQL commands here

```
1 SELECT course_id, sec_id, year, semester,  
2 COUNT(*) AS number  
3 FROM takes  
4 GROUP BY course_id, sec_id
```

Execute

Save the db

Load an SQLite database file: No file chosen

course_id	sec_id	year	semester	number
BIO-101	1	2017	Summer	1
BIO-301	1	2018	Summer	1
CS-101	1	2017	Fall	7
CS-190	2	2017	Spring	2
CS-315	1	2018	Spring	2
CS-319	1	2018	Spring	1
CS-319	2	2018	Spring	1
CS-347	1	2017	Fall	2
EE-181	1	2017	Spring	1
FIN-201	1	2018	Spring	1
HIS-351	1	2018	Spring	1
MU-199	1	2018	Spring	1
PHY-101	1	2017	Fall	1