Assignemnt 3: Relational2

Tom Bohbot

February 2021

1 Find the IDs of all students who were taught by an instructor named Einstein. Your answer may not contain any duplicates.

```
[tombohbot=# tombohbot=# SELECT distinct S.ID
FROM student_s as S, takes_s as T, instructor_s as I, teaches_s as F
WHERE T.ID = S.ID and I.name = 'Einstein' and T.course_id = F.course_id and F.ID = I.ID;
   id
   ------
44553
(1 row)
```

Figure 1: Unique student's Taking Einstein's courses

2 Find the "enrollment" of every section that was taught in Fall 2009, and report the enrollment along with the course "id" and section "id" information.

Figure 2: Enrollment of Fall '09 Sections

3 Find the instructor id and department name of all instructors associated with a department whose budget is greater than \$95,000.

Figure 3: Teachers in high budget departments

4 Find the highest salary of any instructor

```
tombohbot=# SELECT MAX(I.salary)
tombohbot-# FROM instructor_s as I;
max
------
95000.00
(1 row)
```

Figure 4: Highest salary among professors

5 For each department, find the maximum salary of instructors in that department.

Figure 5: Max. salary of each professor per department

6 find the lowest, across all departments, of the per-department maximum salary computed by the preceding query.

Figure 6: Lowest of the max. salaries per department.

7 Find all information about all instructors in the University including "departmental information" such as his department's building and budget.

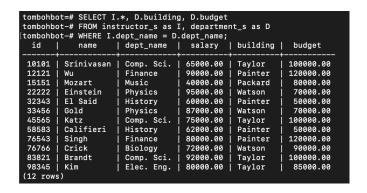


Figure 7: Max. info on all professors

8 Find instructor names, and the courses they teach, for all instructors in the Computer Science department.

Figure 8: Comp Sci instructor names and courses taught

9 Find the number of instructors in each department who taught a course in the Spring 2010 semester.

Figure 9: Number of instructors who taught in Spring 2010 per dept.