CSCI 330 Lab 2

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October 16, 2023

1. **SELECT DISTINCT** course.* **FROM** course, section **WHERE**
   (section.**year** = 2010 **AND** section.semester = "Spring") **OR**
   (section.**year** = 2009 **AND** section.semester = "Fall") **AND**
   section.course_id = course.course_id;

course_id	title	dept_name	credits
BIO−101	Intro. to Biology	Biology	4
BIO−301	Genetics	Biology	4
BIO−399	Computational Biology	Biology	3
CS−101	Intro. to Computer Science	Comp. Sci.	4
CS−190	Game Design	Comp. Sci.	4
CS−315	Robotics	Comp. Sci.	3
CS−319	Image Processing	Comp. Sci.	3
CS−347	Database System Concepts	Comp. Sci.	3
EE−181	Intro. to Digital Systems	Elec. Eng.	3
FIN−201	Investment Banking	Finance	3
HIS−351	World History	History	3
MU−199	Music Video Production	Music	3
PHY−101	Physical Principles	Physics	4

2. **SELECT** name, salary **FROM** instructor **WHERE** salary = (**SELECT MAX**(
   salary) **FROM** instructor);

name	salary
Einstein	95000.00

3. **SELECT** dept_name, budget **FROM** department **WHERE** budget > 42000;

dept_name	budget
Biology	90000.00
Comp. Sci.	100000.00
Elec. Eng.	85000.00
Finance	120000.00
History	50000.00
Music	80000.00
Physics	70000.00

4. **SELECT** dept_name , **MAX**(salary) **FROM** instructor **GROUP BY** (dept_name);

```
+-------------+-------------+
| dept_name   | MAX(salary) |
+-------------+-------------+
| Biology     |    72000.00 |
| Comp. Sci.  |    92000.00 |
| Elec. Eng.  |    80000.00 |
| Finance     |    90000.00 |
| History     |    62000.00 |
| Music       |    40000.00 |
| Physics     |    95000.00 |
+-------------+-------------+
```

5. **SELECT DISTINCT** name **FROM** student , takes **WHERE** student.ID = takes.ID **AND** course_id **LIKE** "CS–%";

```
+----------+
| name     |
+----------+
| Zhang    |
| Shankar  |
| Levy     |
| Williams |
| Brown    |
| Bourikas |
+----------+
```

6. **SELECT** sec_id , **COUNT**(∗) **FROM** takes
   WHERE semester = "Spring" **AND year** = 2009 **GROUP BY** (sec_id);

```
+--------+----------+
| sec_id | COUNT(∗) |
+--------+----------+
| 1      |        1 |
| 2      |        2 |
+--------+----------+
```

7. **SELECT** sec_id , **COUNT**(∗) **FROM** takes
   WHERE semester = "Spring" **AND year** = 2009
   GROUP BY (sec_id) **ORDER BY COUNT**(∗) **DESC LIMIT** 1;

```
+--------+----------+
| sec_id | COUNT(∗) |
+--------+----------+
| 2      |        2 |
+--------+----------+
```