Big Data Analytics – Midterm Sample Questions

Download and install the data base `MySQL_db_university_basic_gen.sql` from your LATTE. Answer the following questions.

1. Fetch the name of all the instructors using as column alias `professor_name`.

2. Fetch the name of all the instructors using the alias `PROFESSOR_NAME`. Names of the faculty should be all CAPITAL LETTERS.

3. Fetch the name of all the different departments that appear in the table `course`.

4. Write a query to recover the first 4 characters (including white spaces) from the name of each instructor. Do not worry if the outcome is meaningless. Just make sure the 4 characters appear.

5. Write a query to recover all the instructors whose names start with the letter E.

6. Write a query to print the title of all the courses removing all the any extra white spaces from the left (in case those actually existed).

7. Print the length of all the names of the instructors. For example, the length of Einstein is 8. Do not worry for white spacing. For example 'El Said' should have length 7.

8. Write a query to write, on a single column named IS_LOCATED the following string
    a. 'The department: ', + name_of_the_department + , ' is located at: ' + name of the building.

9. Write a query to recover all the information of the table `instructor` ordered by department and salary.

10. Write a query that recovers the information of all the instructors in the departments of History and Finance.

11. Write a query that recovers all the instructors in departments other than of history and Finance.

12. List all the departments whose name has 7 letters.

13. List all the instructors that have taught at least once in the Packard building.

14. List all the instructors with a wage between $70 and $90K.

15. Write a query that reports the names of all the faculty of the courses in the computer science department. Make sure there are no duplicities in the final table.

16. Write a query to show only the even rows from the `student` table.

17. Write a query to show only odd rows from the `student` table.

18. Write a query to recover the current date.

19. Write a query to recover the 3rd highest salary.

20. Write a query to recover the top 3 salaries of the instructors.

21. Write a query to recover the bottom 3 salaries of the instructors.

22. Write a query to recover the name of all the faculty with a salary above the mean of their department.