



Computer Science Department
CSC 3300-001 Database Management Systems
Project 2 (09/25/2020; Fall 2020)
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What to submit as a solution to this lab?

File in the PDF or TXT format with answers to the below exercises.

Where to submit this file?

The dropbox in iLearn named Project3. The due date for this project is 03/02/2016 at 9:00pm. The end date for this project is 03/04/2016 at 9:00pm.

Rules

You may share on piazza the database. You may discuss on piazza what has to be done (clarification of questions/how to use MySQL Server etc.). You may not share partial solutions. You may not share results of the queries.

How this assignment will be graded?

This assignment is worth 120 points. Good answer to each question is worth 2 points. If there is no explanation, in case it is required, you can not get more than 1 point.

SQL queries retrieving the following information from the MySQL's Employees Sample Database. One SQL query for each request.

1. Titles given to the employees.
2. When the employee 10010 was hired?
3. Number of days the employee 10010 worked for the Production department.
4. Number of days the employee 10010 worked for the Quality Management department.
5. The date the company started operating. Explain how you determined it (your assumptions).
6. The longest working employee(s). Explain how you determined it.
7. Number of current employees.
8. Employee(s) with the highest salary.
9. Department numbers with corresponding department names.
10. Number of departments.
11. Percentage of women in every department.
12. Percentage of currently working women in every department.
13. The most commonly given title(s) to the new employee.

14. The most common title(s) of the employees at the time they quit. Explain how you determined it.
15. The earliest born employee. (Date an employee was born who would be the oldest now.)
16. Employees who became managers but their salary didn't increase.
17. The youngest employee(s) at the time of hiring.
18. The youngest employee(s) at the time of becoming a manager.
19. Current oldest manager(s).
20. The smallest salary at the time of hiring.
21. The highest salary, the name of the employee(s) and his(their) birthdate at the time of hiring.
22. Department that doesn't have any employees at the moment. There can be more than one.
23. Department that currently doesn't have any employees but had them before. There can be more than one.
24. Shortest working employee(s). Explain how you determined it.
25. Employees that weren't associated with any department at the time of hiring.
26. For each department and for each possible title the number of employees with that title in that department.
27. The most common first name of women.
28. The most common last name.
29. The average time after which the salary increases from the date of hiring.
30. Gender of most of the managers.
31. Amount of money the department Production spent last month on salaries.
32. Career paths in the Production department.
33. Month and year most new employees were hired.
34. Average salary of women over the age of 30 as well as average salary of men over the age of 30.
35. Average salary in the Production department.
36. How much the employee 10005 earned for the month of May 2009.
37. Position women work the longest.
38. Current average salary of managers as well as current average salary of all other employees in the Development department.
39. Average age of current managers as well as average age of all other employees.
40. Number of employees who have the same last name as some other employee's first name.
41. Number of employees with the last name ending with "ski".
42. Number of employees with the last name starting with "Mc" followed by a capital letter.
43. The most common name given to girls in 2009.

44. The department(s) employees work the longest.
45. Highest raise someone was given.
46. Manager(s) who didn't have a word "manager" in their title.
47. Titles given to the employees in each department.
48. Employees that didn't quit at the end of the month.
49. Year(s) with the highest employment rate.
50. The most common title(s) of employees at the time they started working in another department.
51. The most common title(s) of employees at the time they became managers of some department.
52. Number of employees with unique last name.
53. Managers with a "Staff" title.
54. Number of employees who right away became some department managers.
55. Employee(s) who had the longest break from this company.
56. Employee(s) who were managers in more than one department.
57. The smallest number of days an employee was a manager in some department.
58. Employees (emp_nos) who weren't managers.
59. Current title and emp_no of each current employee.
60. Employee(s) hired the latest. If employee 5 (emp_no) was hired 2 weeks ago and noone else was hired since that time, then that query should return info about emp_no=5. If 2 employees were hired one week ago and since that time any person was hired, then info about these 2 employees should be returned in the result of the query.