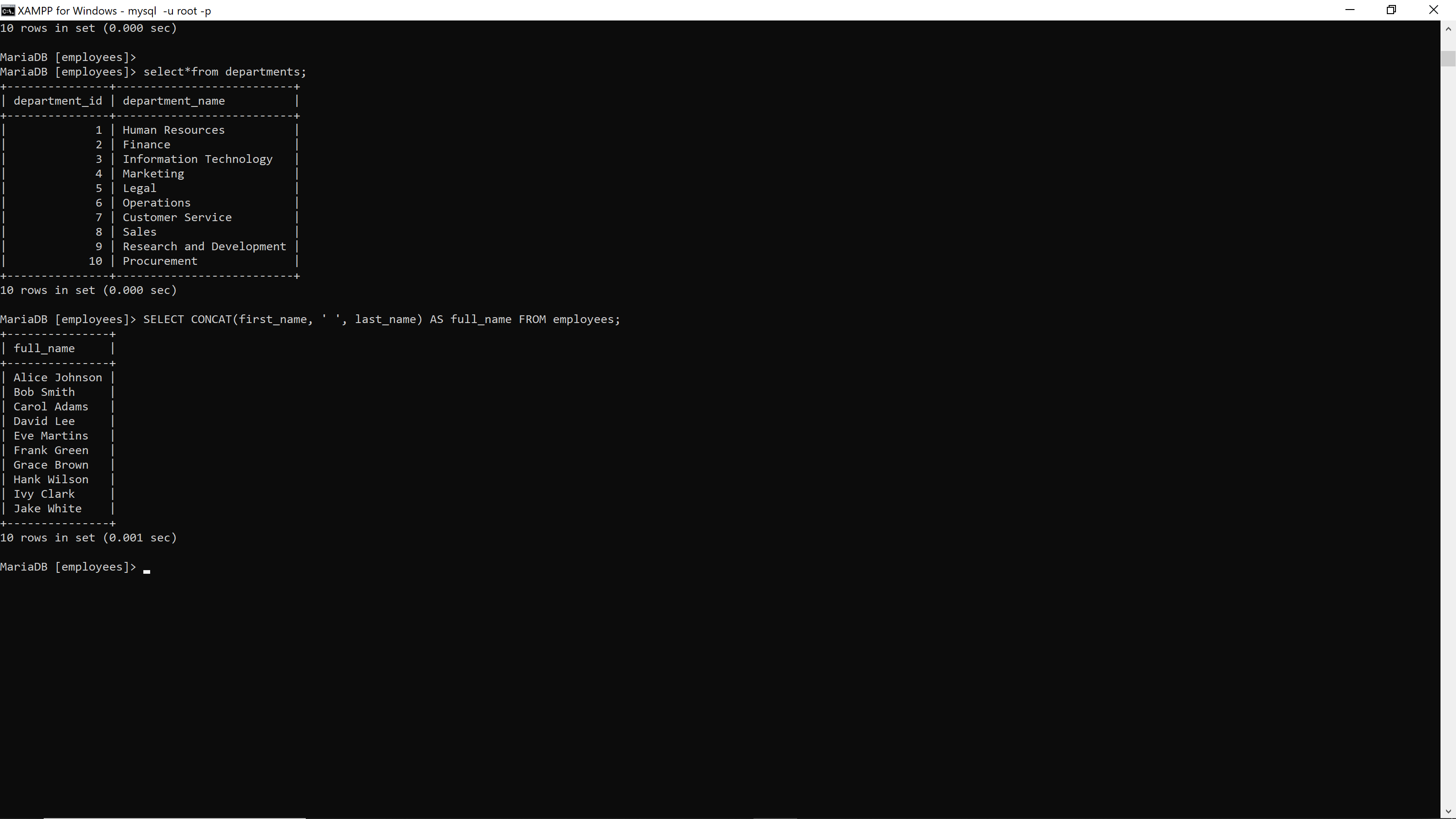
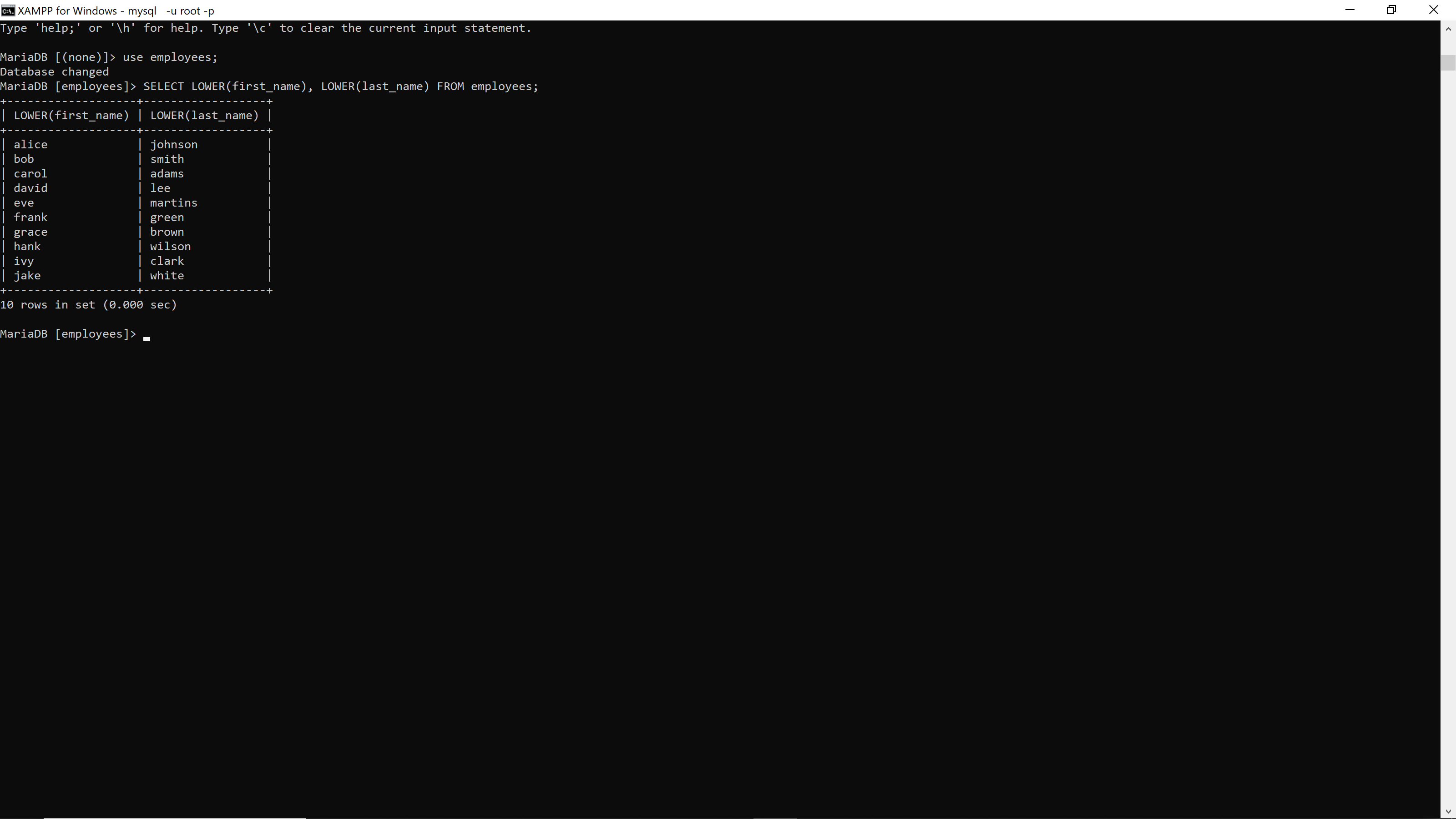
**MUBERWA AMANI NABELLA  
29376  
Database Management system**

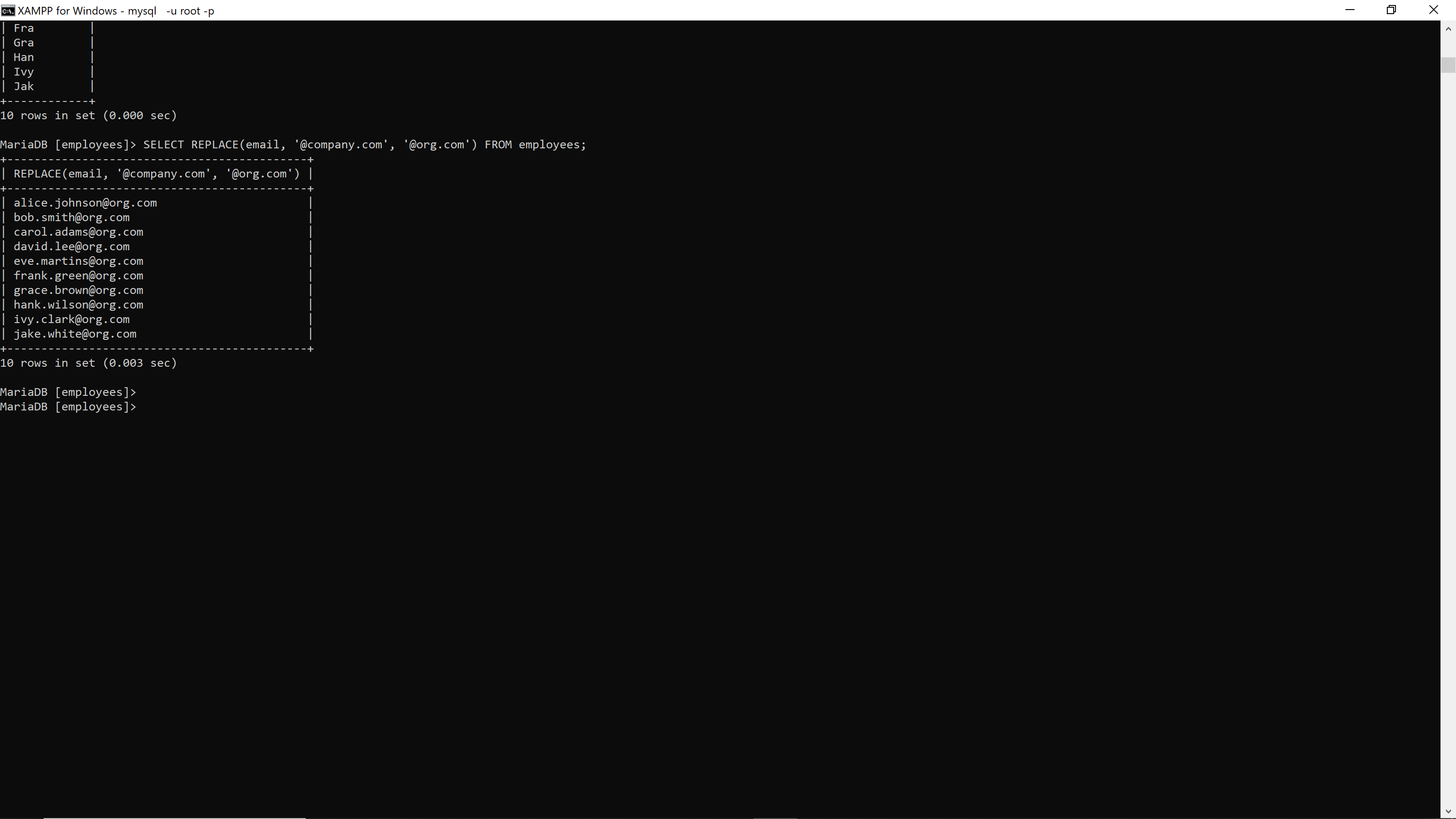
**Assignment SQL Function**

**PART 1:String Function Q(15)**

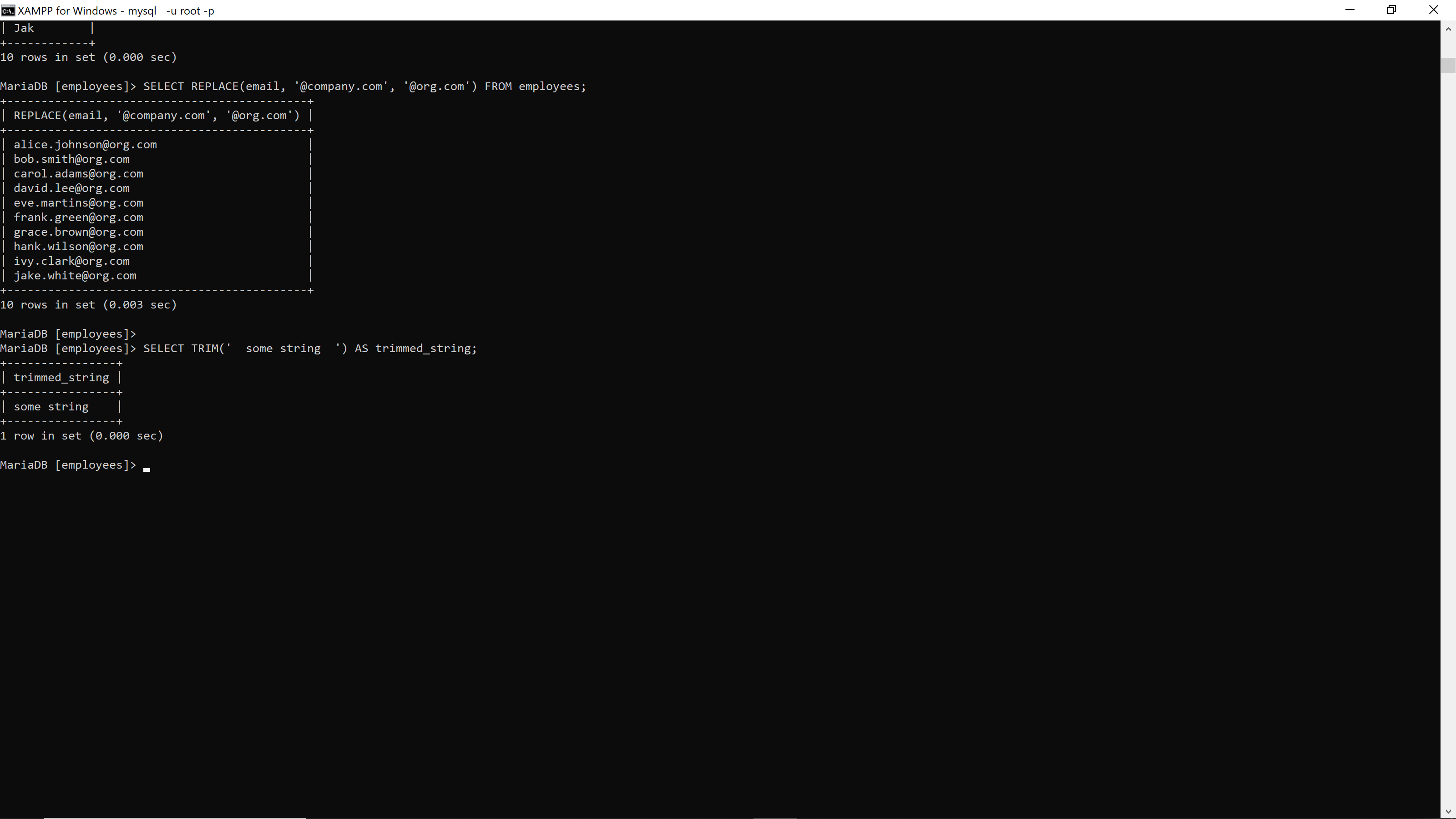
1. SELECT CONCAT(first\_name, ' ', last\_name) AS full\_name FROM employees; **29376**
2. SELECT LOWER(first\_name), LOWER(last\_name) FROM employees; **29376**



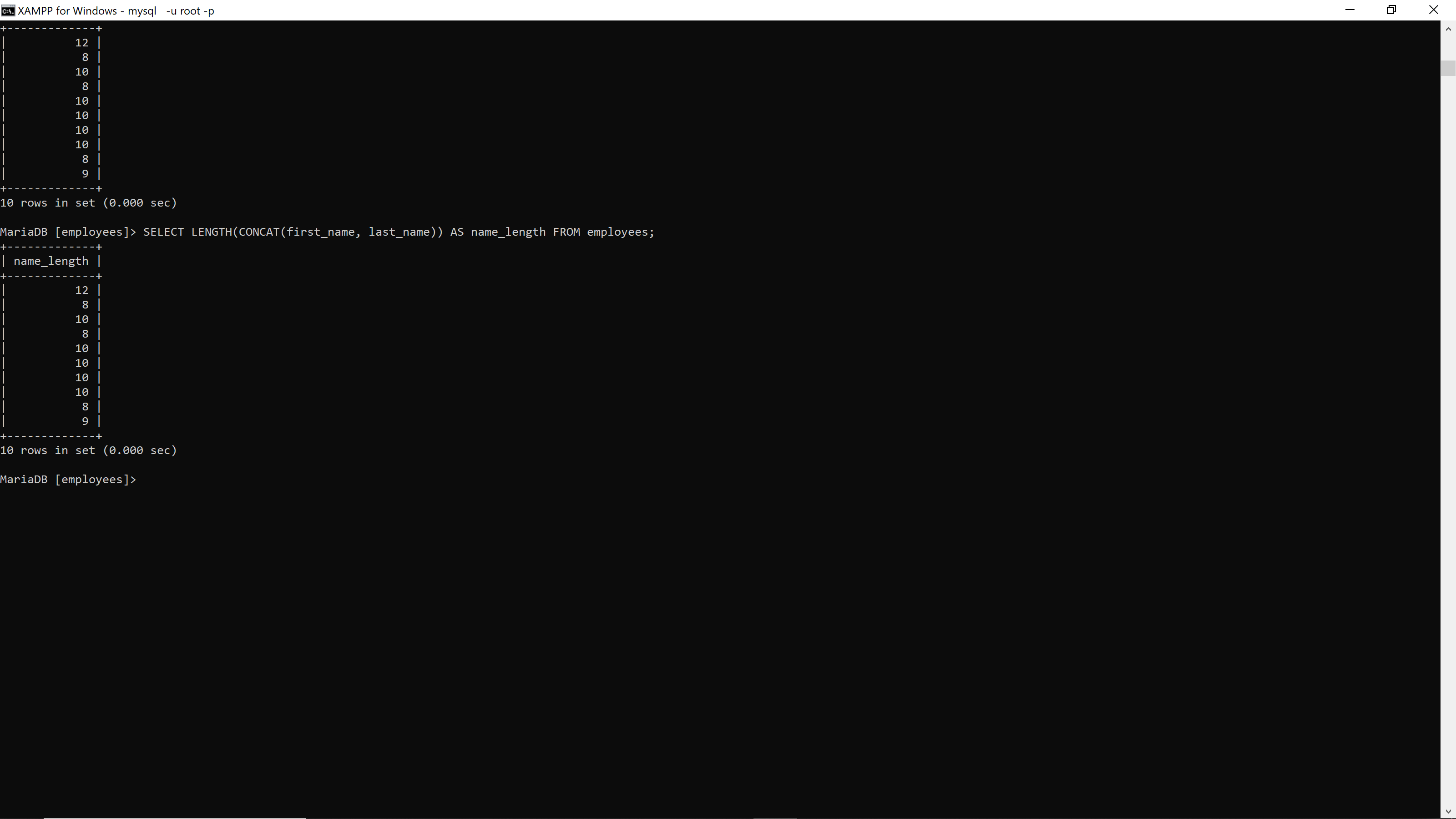
1. SELECT SUBSTRING(first\_name, 1, 3) AS short\_name FROM employees; **29376**
2. SELECT REPLACE(email, '@company.com', '@org.com') FROM employees; **29376**



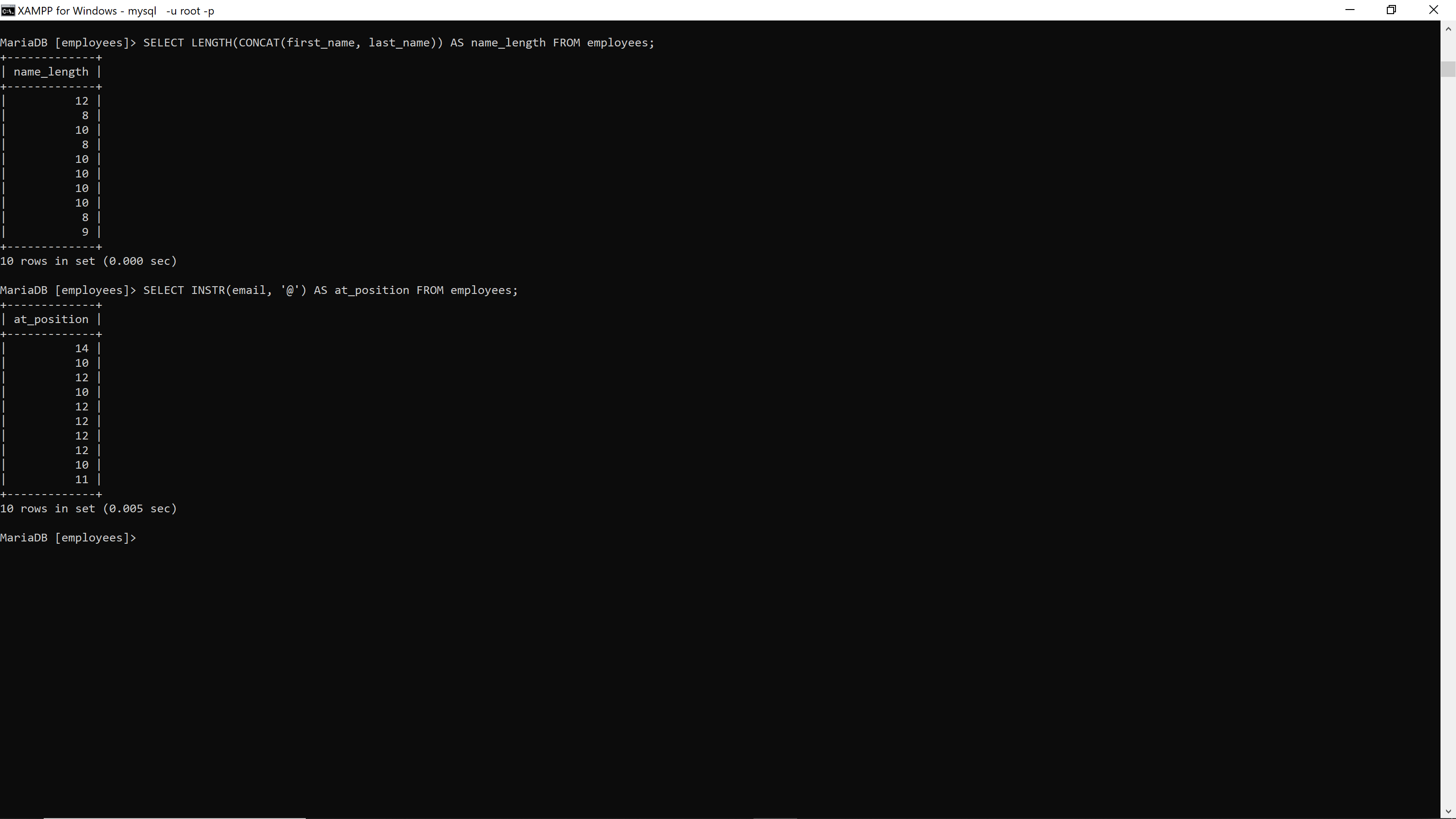
5. SELECT TRIM(' some string ') AS trimmed\_string; **29376**



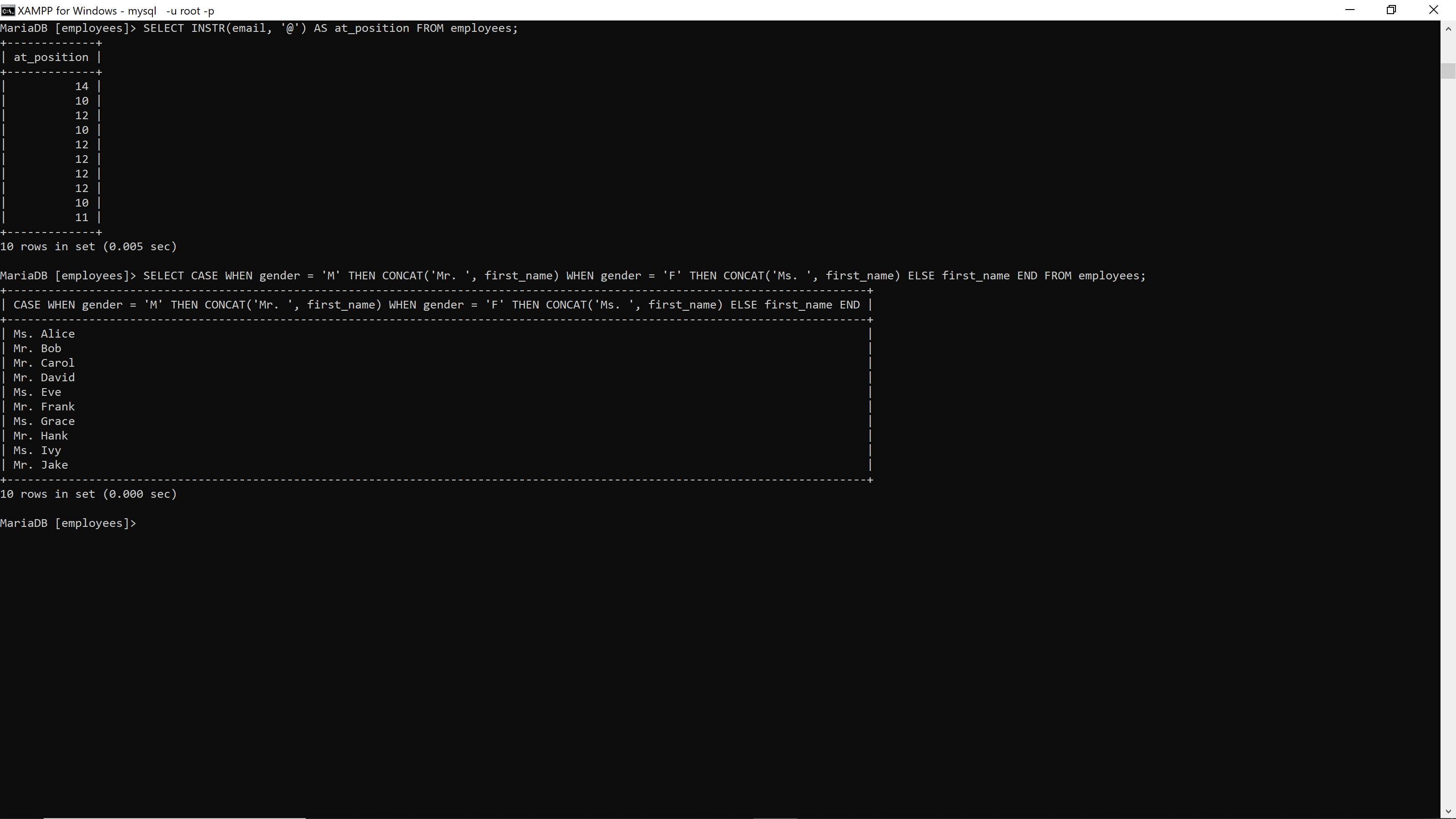
1. SELECT LENGTH(CONCAT(first\_name, last\_name)) AS name\_length FROM employees; **29376**



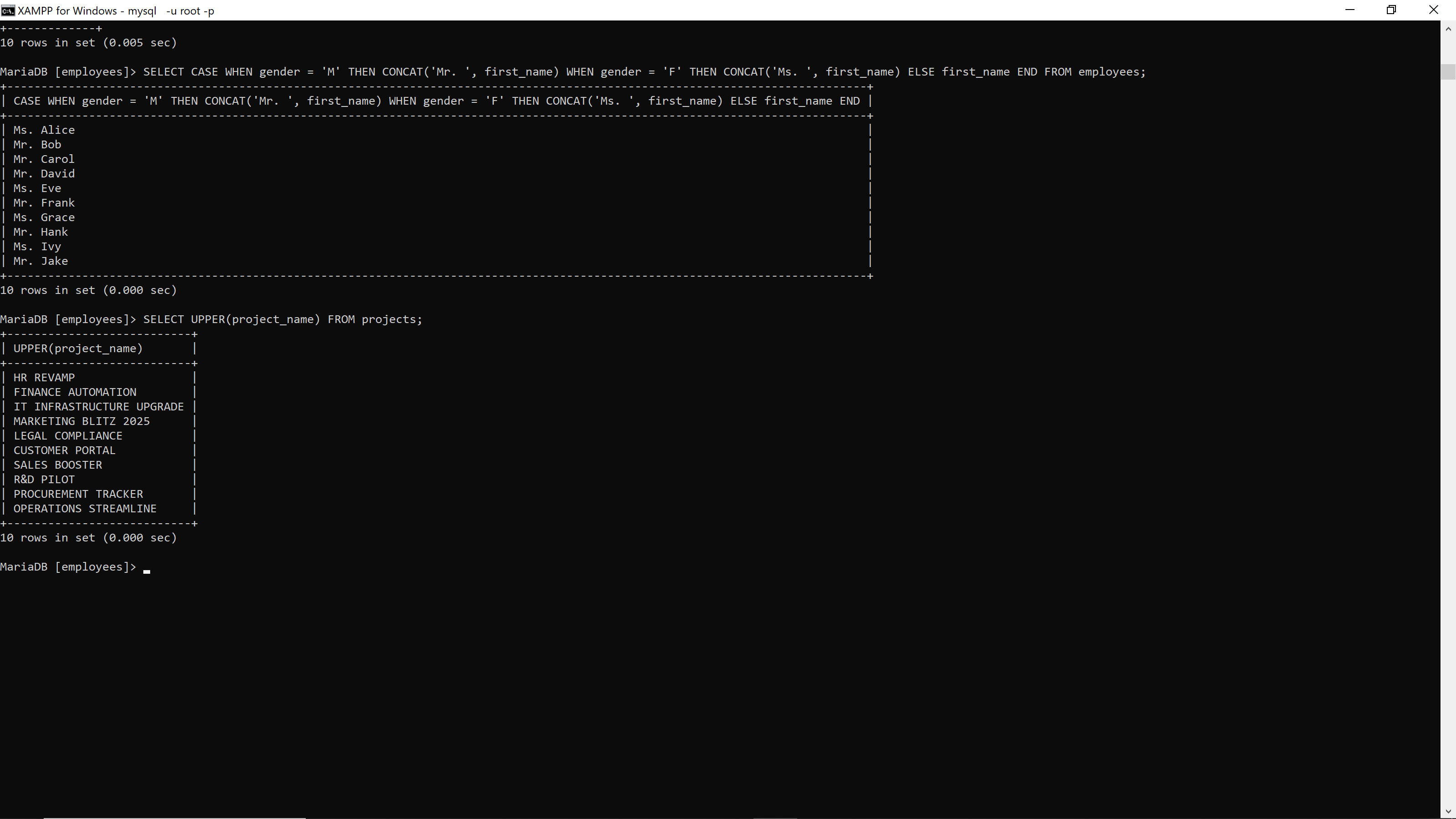
1. SELECT INSTR(email, '@') AS at\_position FROM employees; **29376**



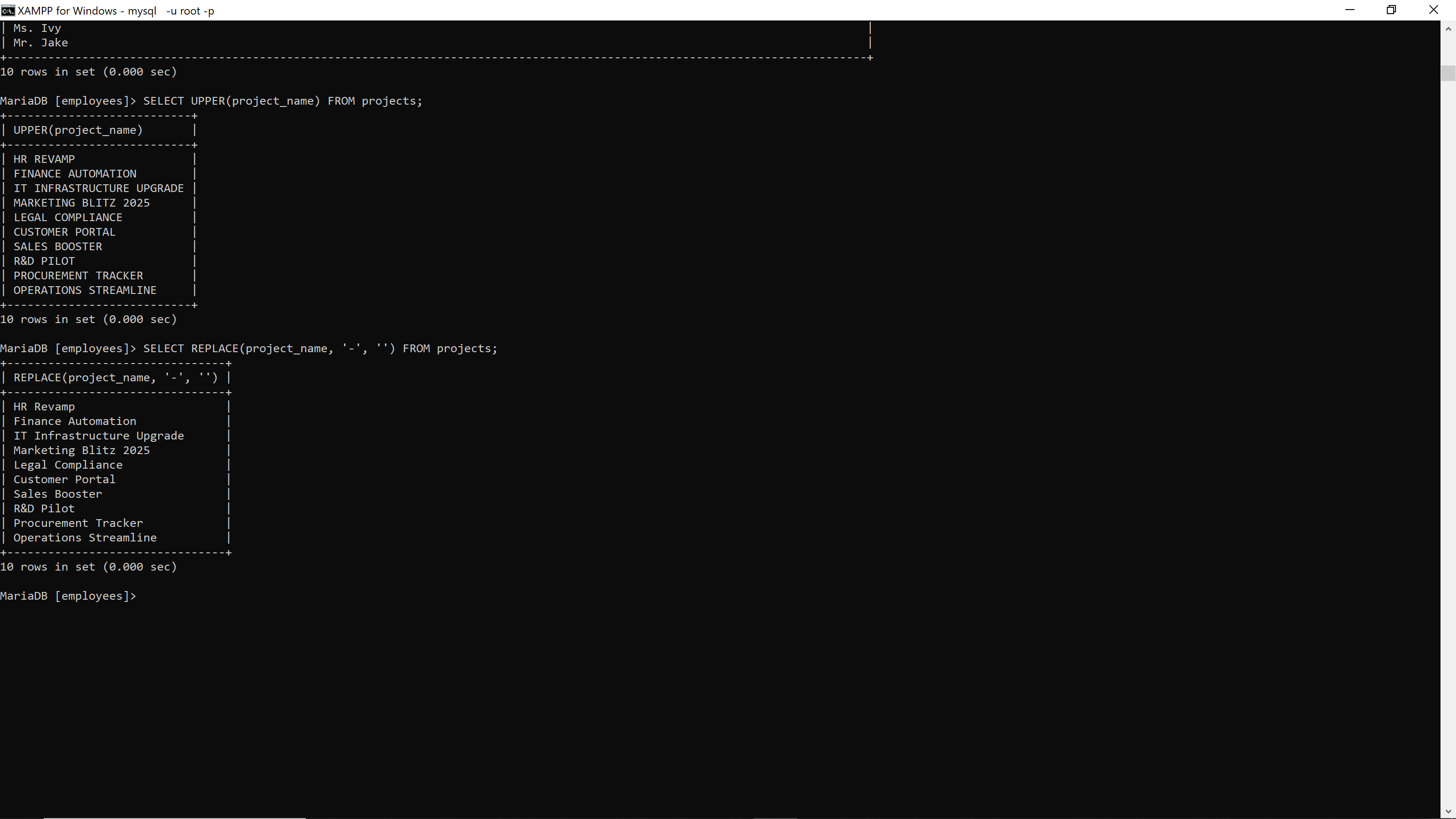
1. SELECT CASE WHEN gender = 'M' THEN CONCAT('Mr. ', first\_name) WHEN gender = 'F' THEN CONCAT('Ms. ', first\_name) ELSE first\_name END FROM employees; **29376**



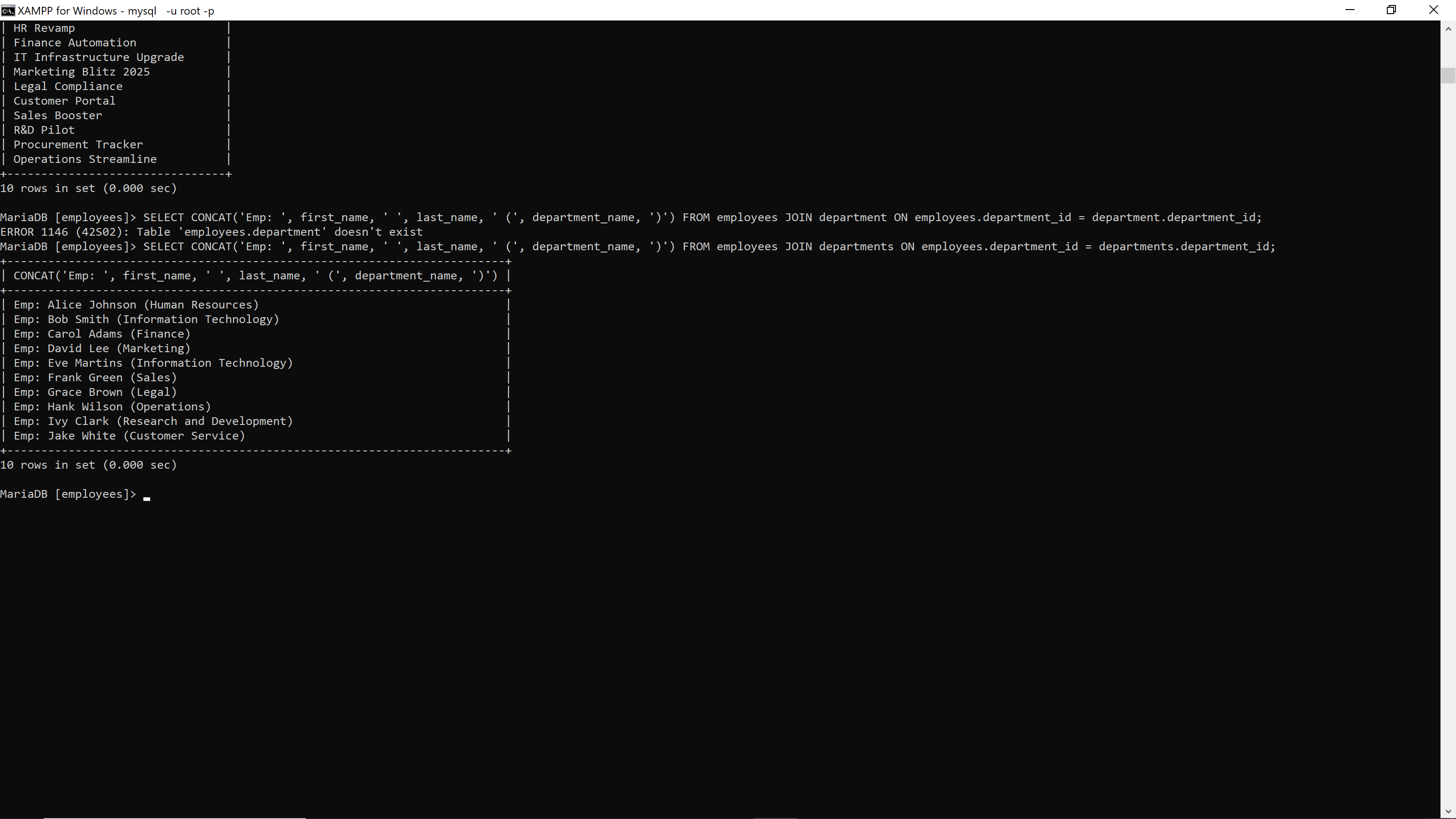
1. SELECT UPPER(project\_name) FROM projects; **29376**



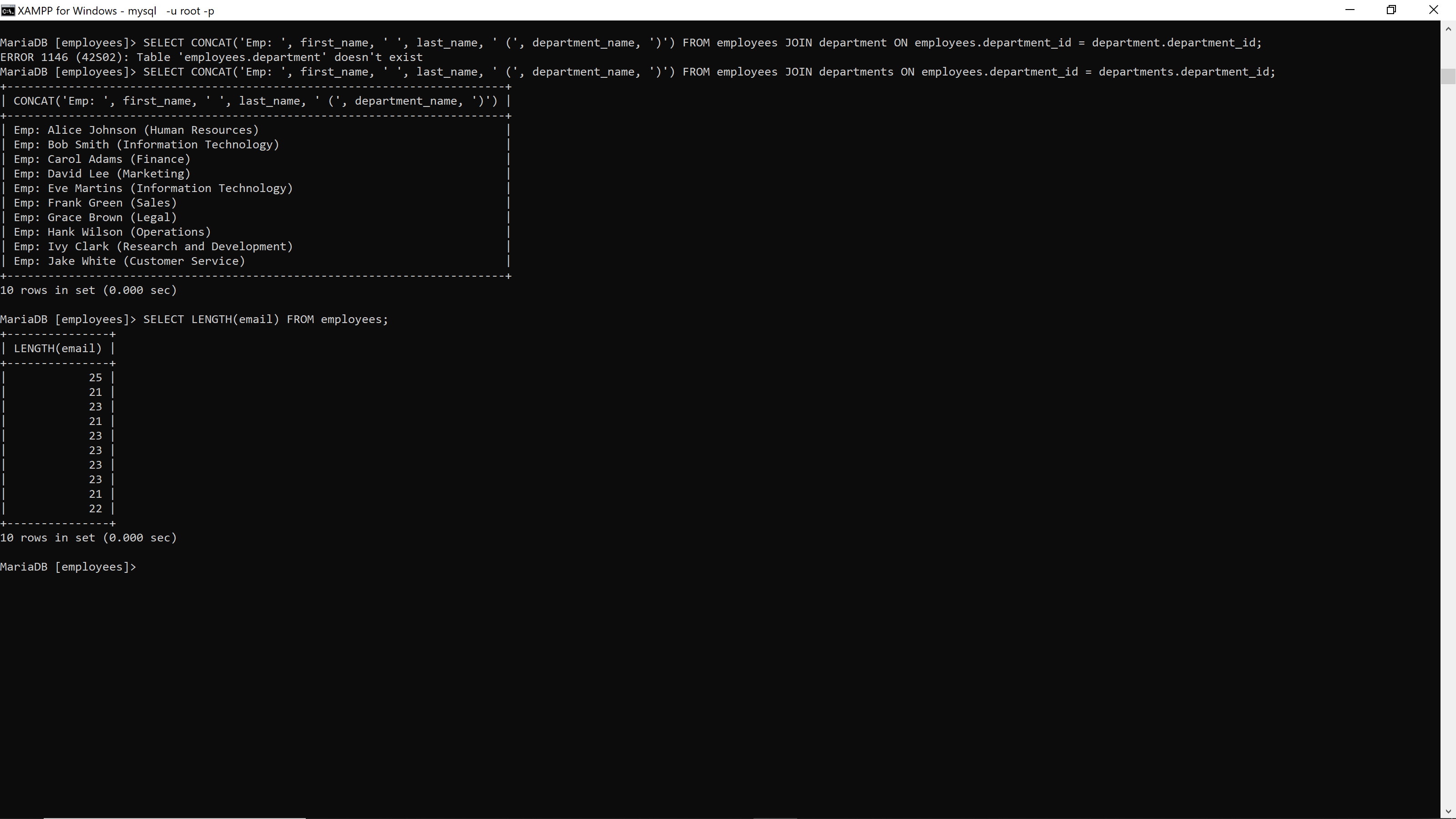
1. SELECT REPLACE(project\_name, '-', '') FROM projects; **29376**



11. SELECT CONCAT('Emp: ', first\_name, ' ', last\_name, ' (', department\_name, ')') FROM employees JOIN departments ON employees.department\_id = departments.department\_id; **29376**



12.SELECT LENGTH(email) FROM employees; **29376**



13. SELECT SUBSTRING\_INDEX(email, '@', 1) AS lastname\_part FROM employees; **29376**



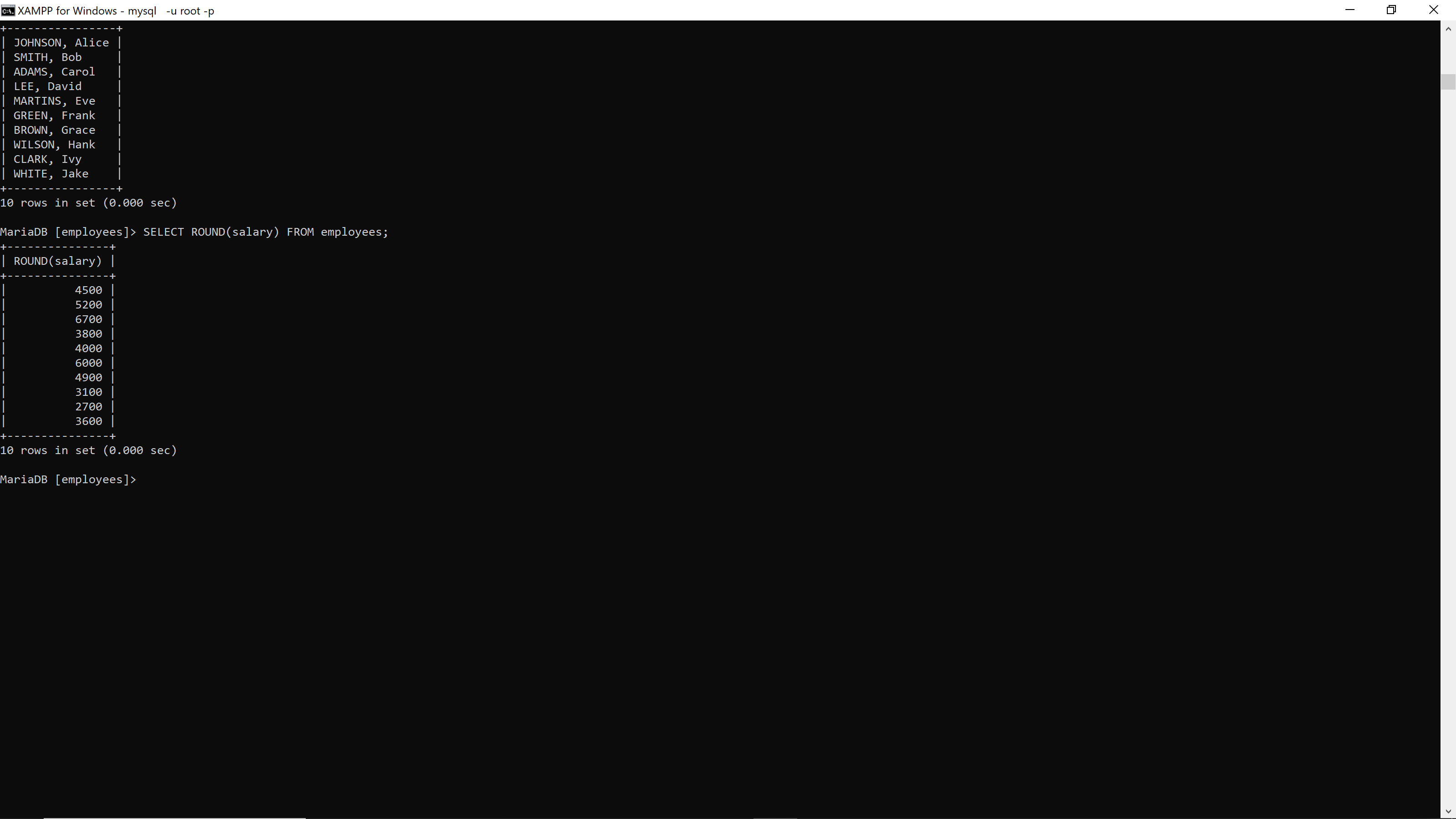
14. SELECT CONCAT(UPPER(last\_name), ', ', first\_name) AS formatted\_name FROM employees; **29376**



15. SELECT CONCAT(first\_name, ' ', last\_name, ' (Active)') FROM employees WHERE employee\_id IN ( SELECT employee\_id FROM employee\_projects WHERE assigned\_date IS NULL); **29376**

**PART 2:Numeric Function Exercises**

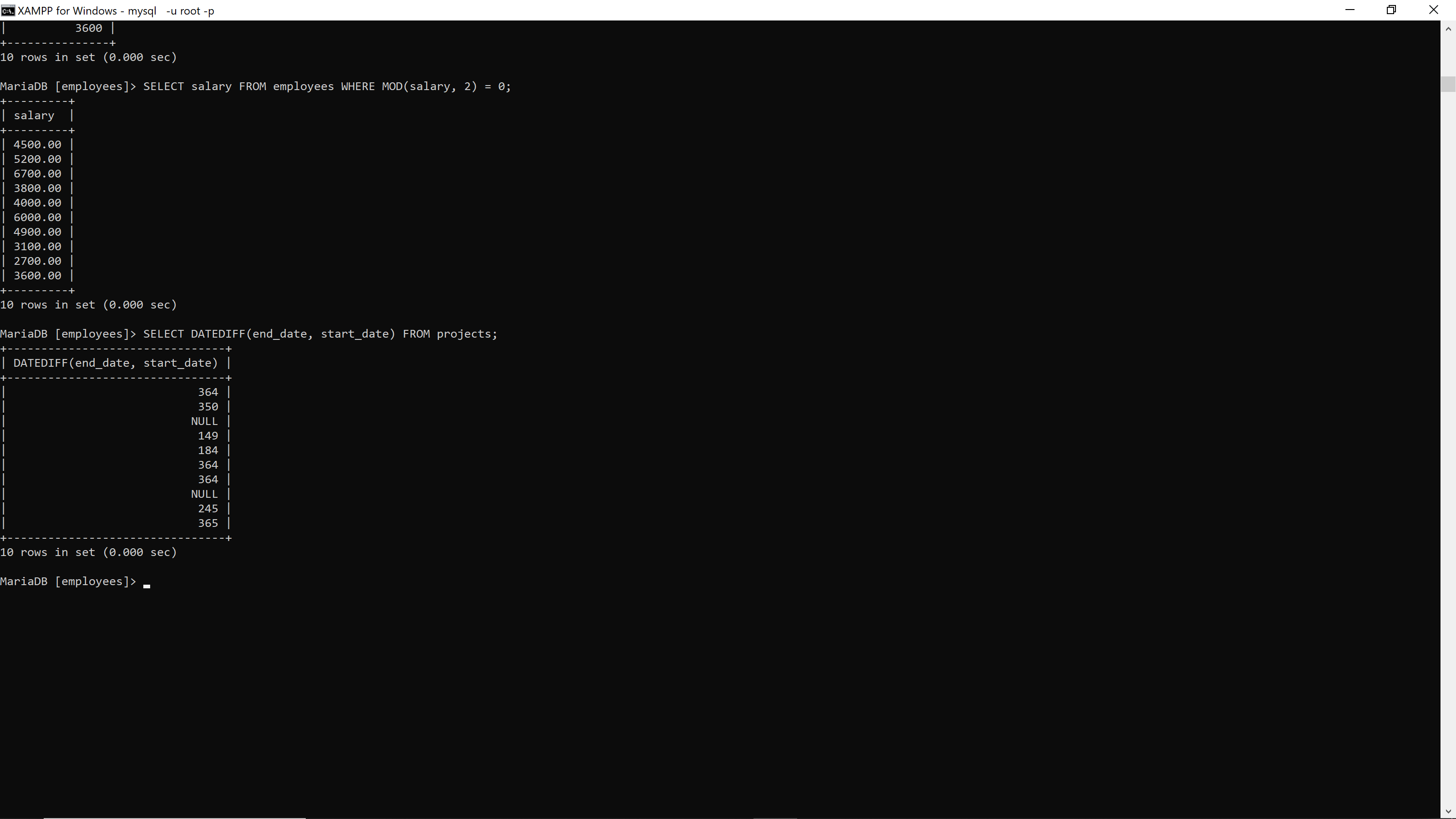
16. SELECT ROUND(salary) FROM employees**29376**



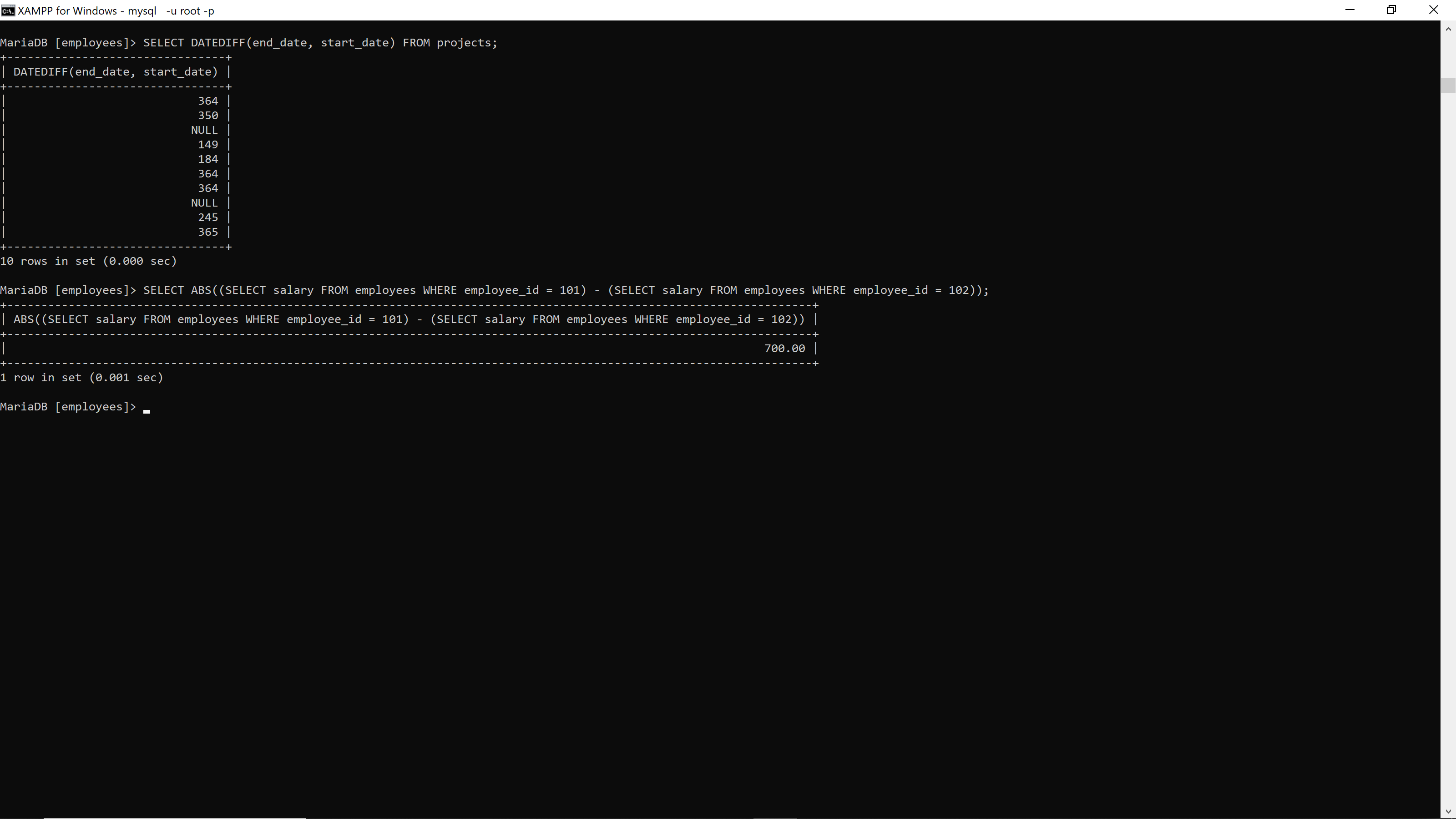
17. SELECT salary FROM employees WHERE MOD(salary, 2) = 0; **29376**



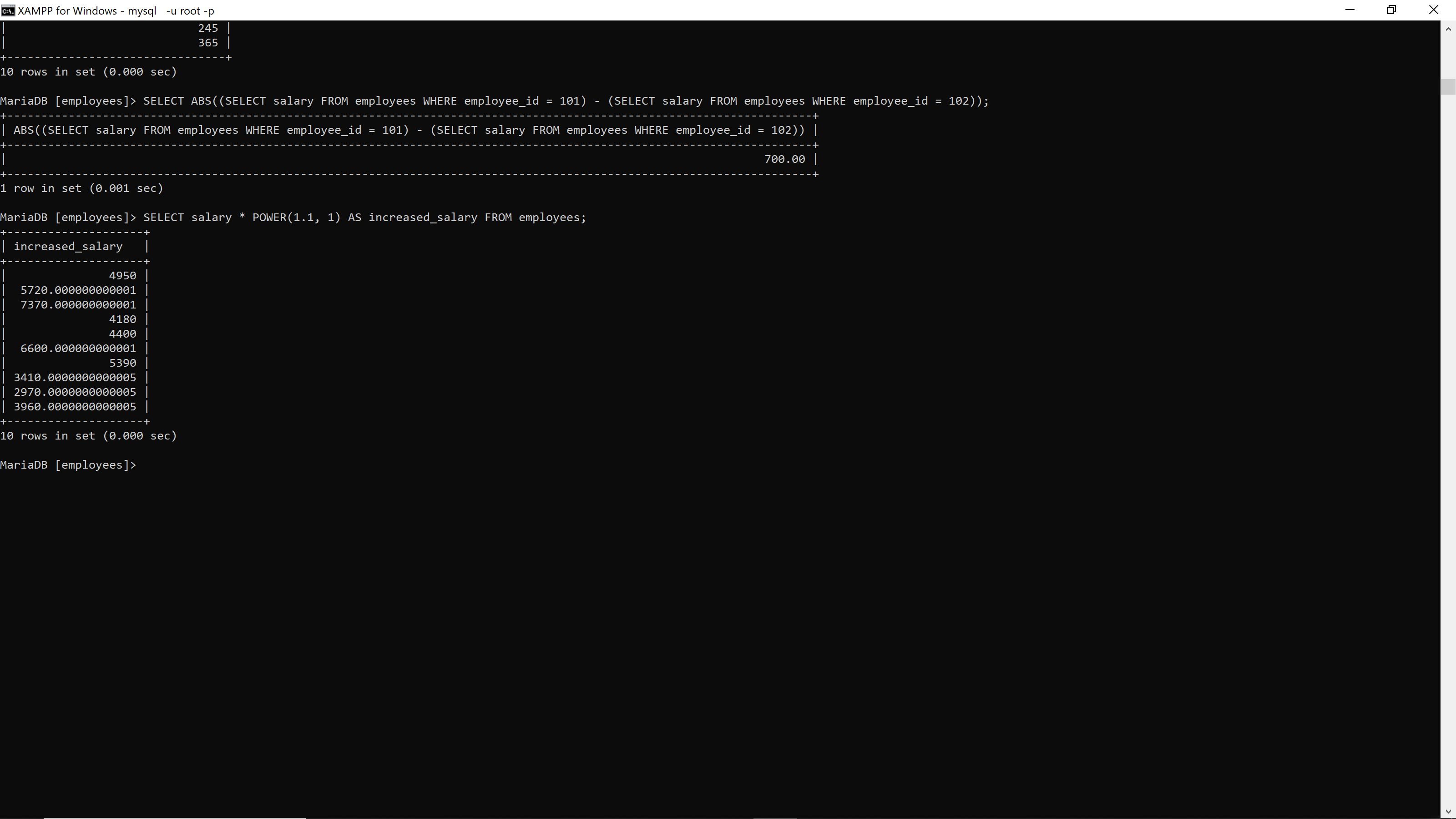
18. SELECT DATEDIFF(end\_date, start\_date) FROM projects; **29376**



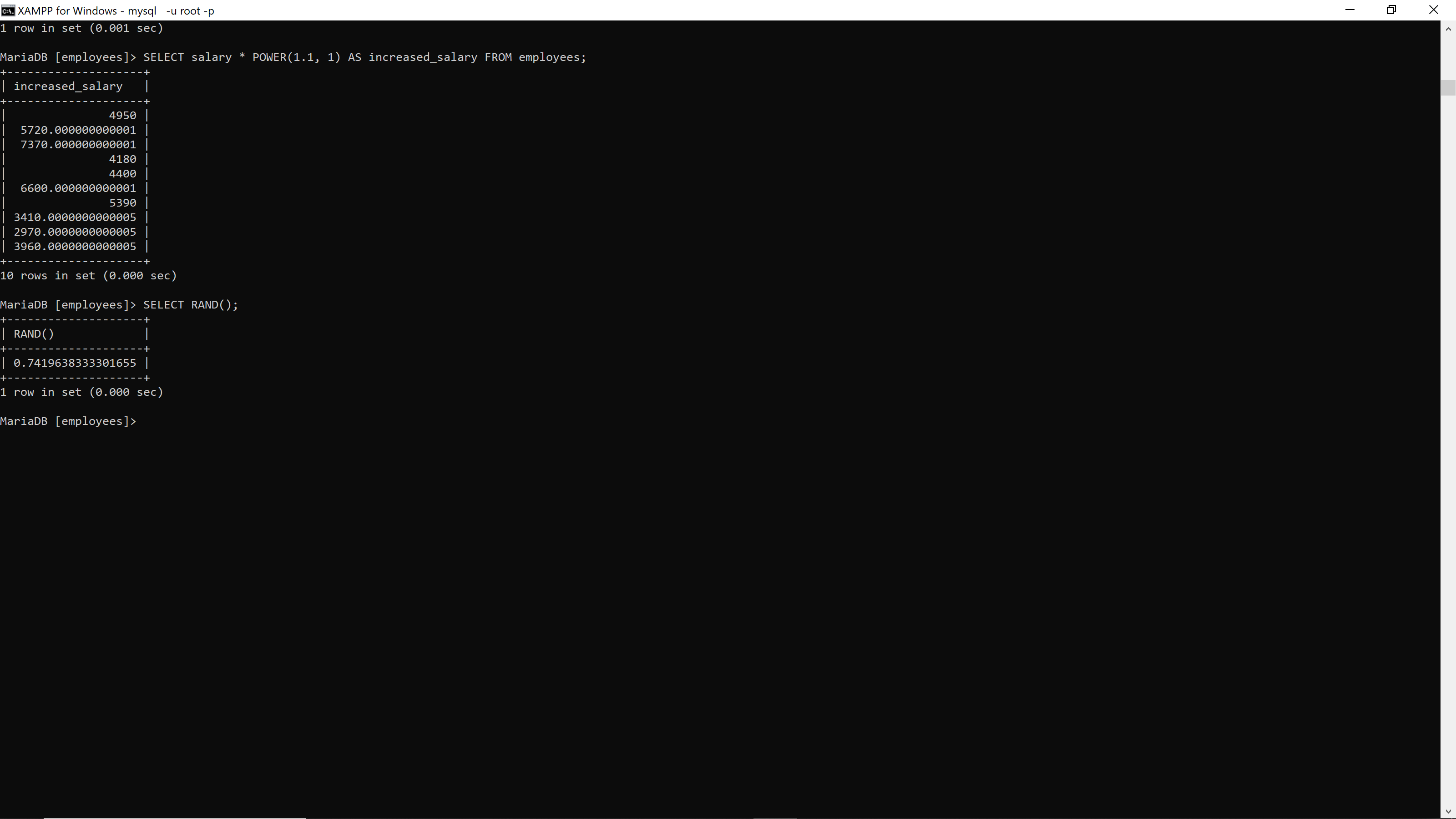
19. SELECT ABS((SELECT salary FROM employees WHERE employee\_id = 101) - (SELECT salary FROM employees WHERE employee\_id = 102)); **29376**



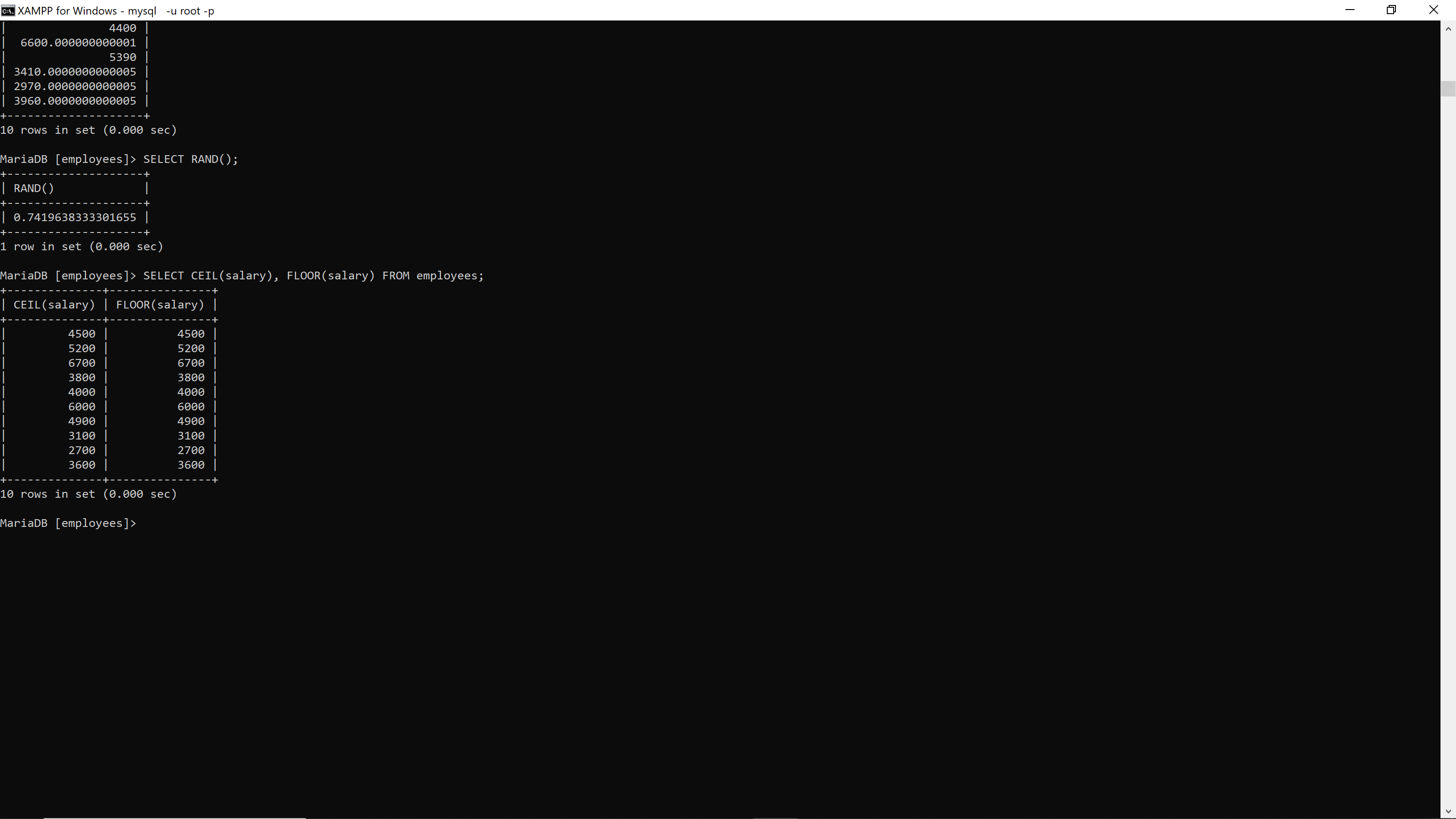
20. SELECT salary \* POWER(1.1, 1) AS increased\_salary FROM employees; **29376**



21. SELECT RAND();**29376**

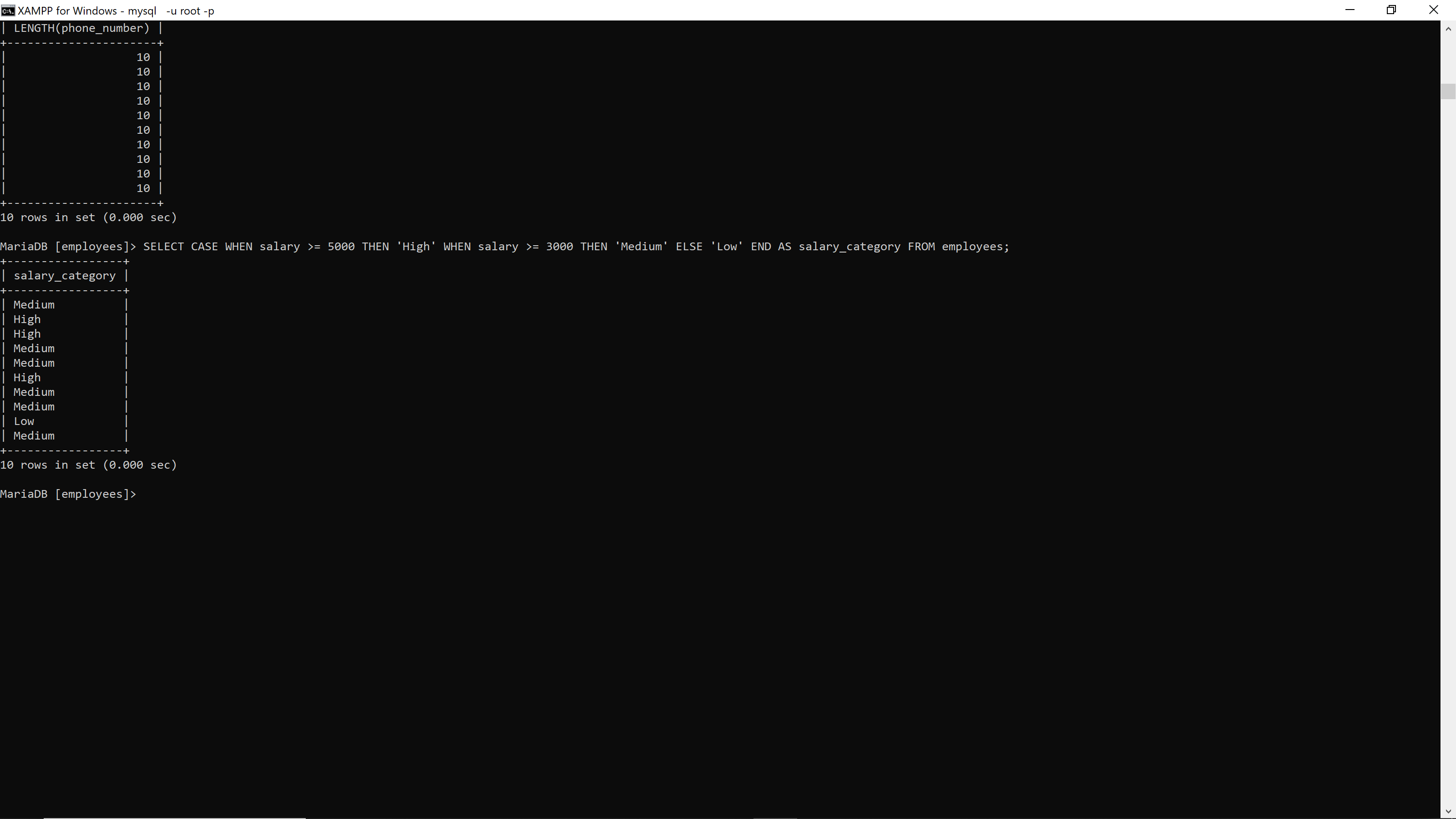


22. SELECT CEIL(salary), FLOOR(salary) FROM employees; **29376**

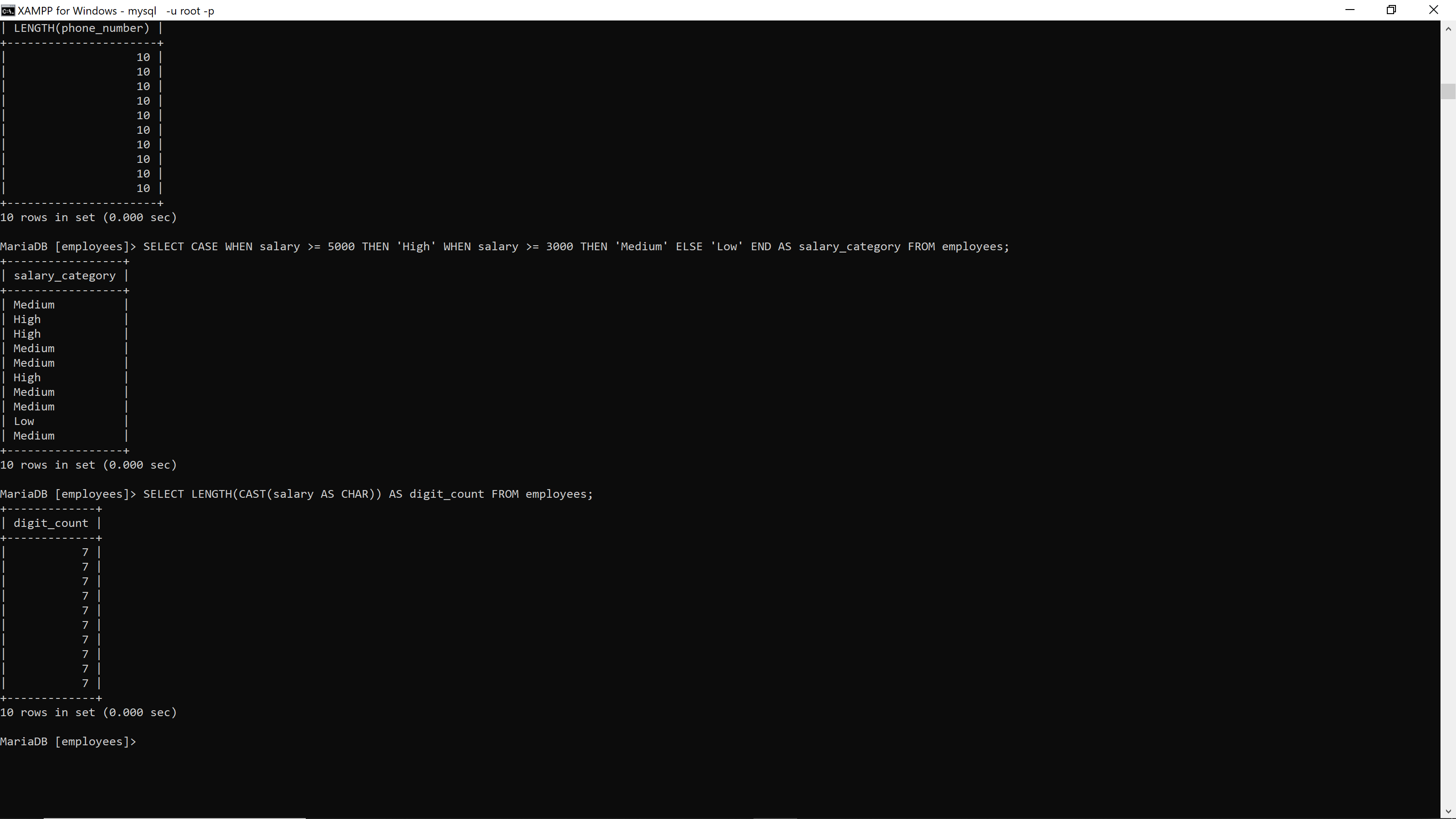


23. SELECT LENGTH(phone\_number) FROM employees; **29376**



24. SELECT CASE WHEN salary >= 5000 THEN 'High' WHEN salary >= 3000 THEN 'Medium' ELSE 'Low' END AS salary\_category FROM employees; **29376**  


25. SELECT LENGTH(CAST(salary AS CHAR)) AS digit\_count FROM employees; **29376**

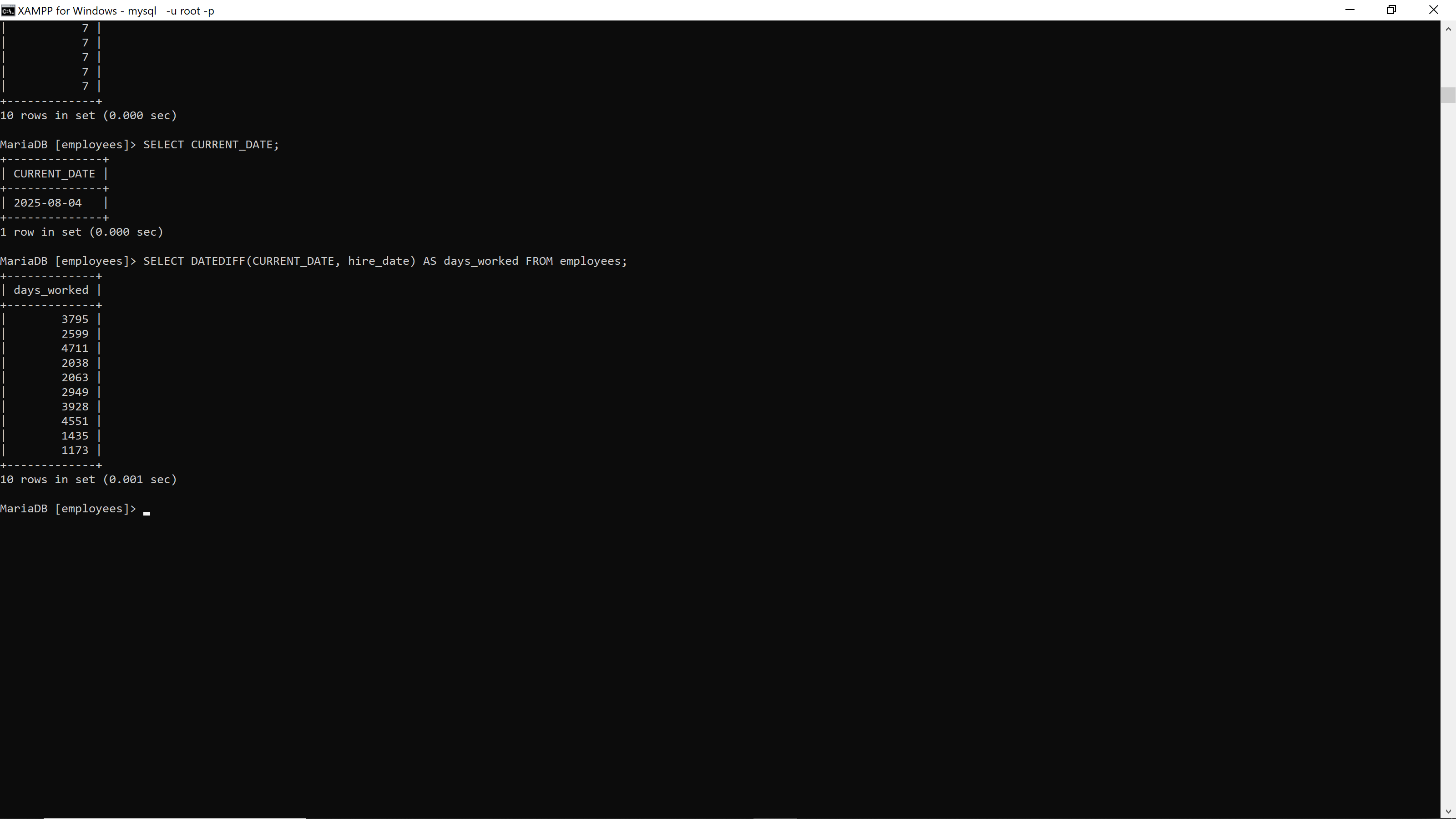


**PART 3:Date/Time Function Exercises**

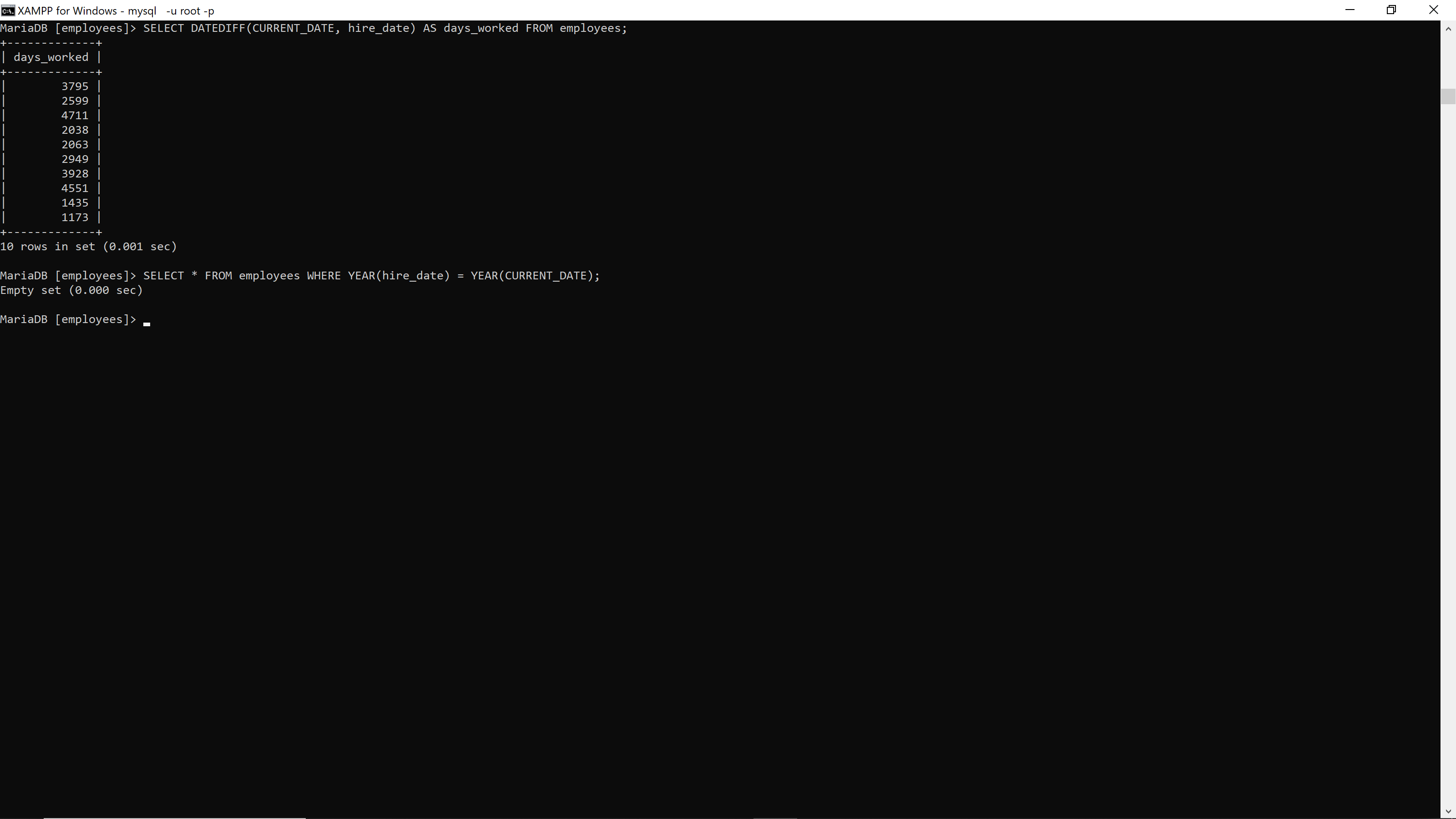
26. SELECT CURRENT\_DATE; **29376**



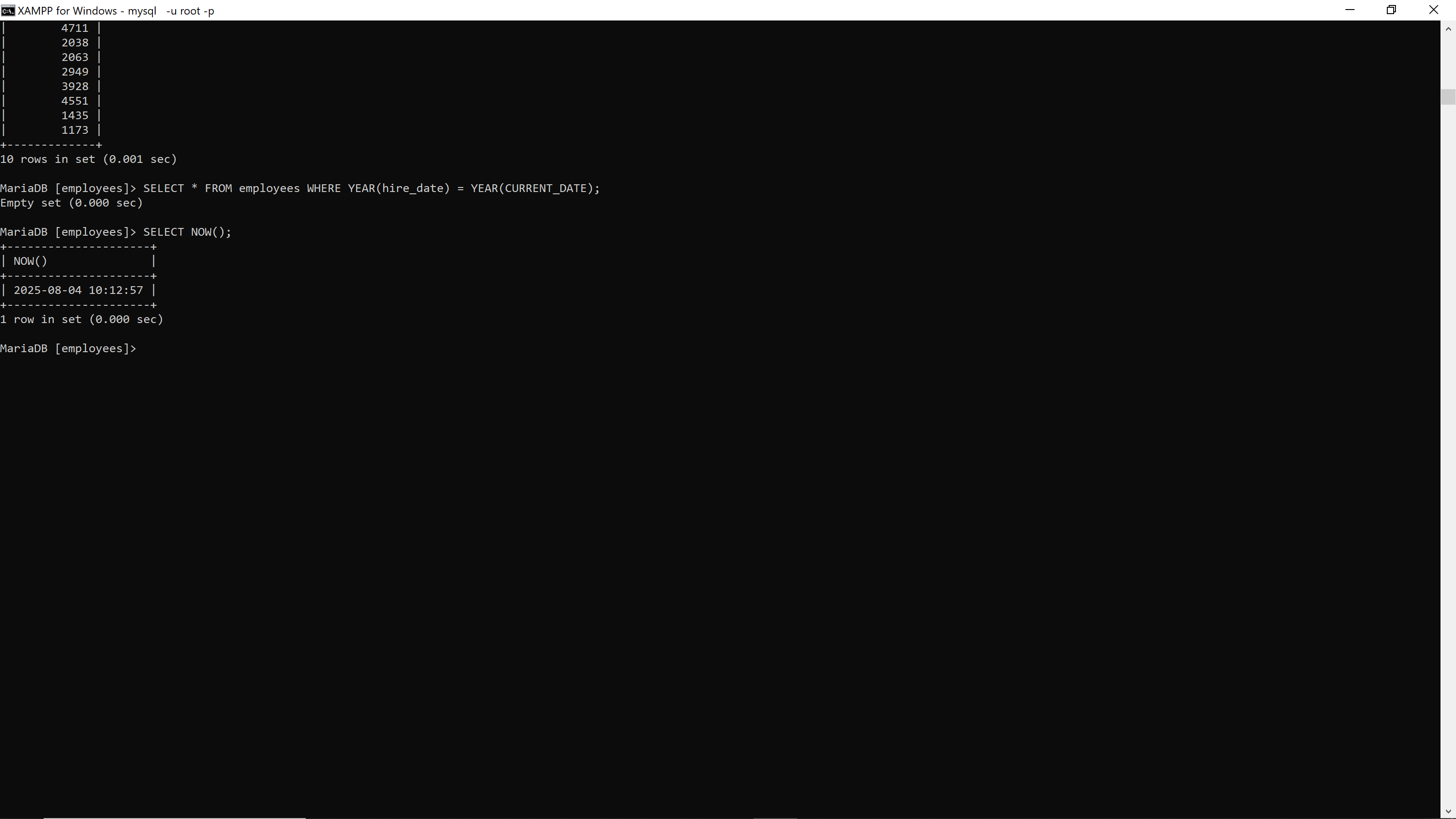
27. SELECT DATEDIFF(CURRENT\_DATE, hire\_date) AS days\_worked FROM employees; **29376**



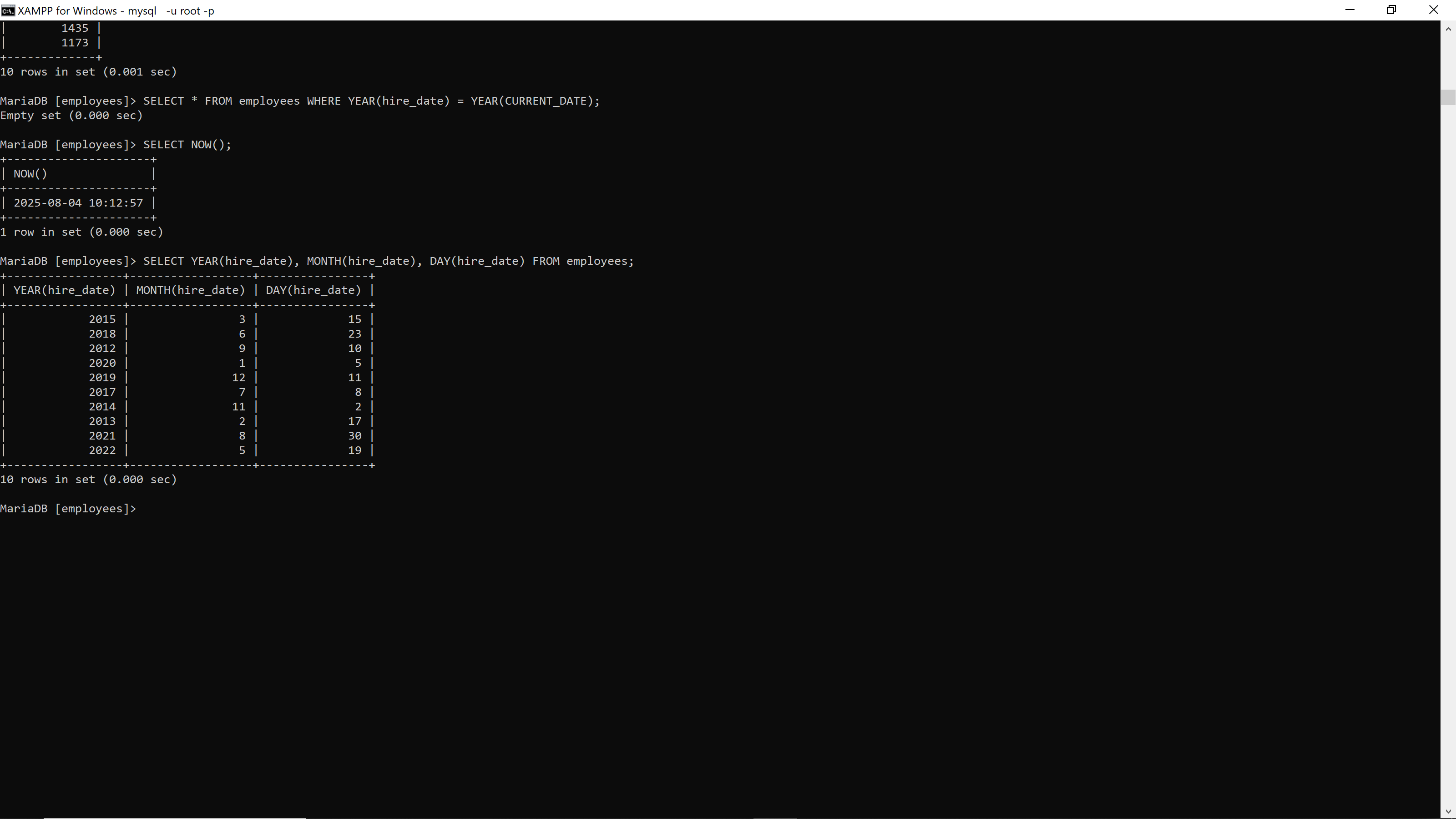
28. SELECT \* FROM employees WHERE YEAR(hire\_date) = YEAR(CURRENT\_DATE); **29376**



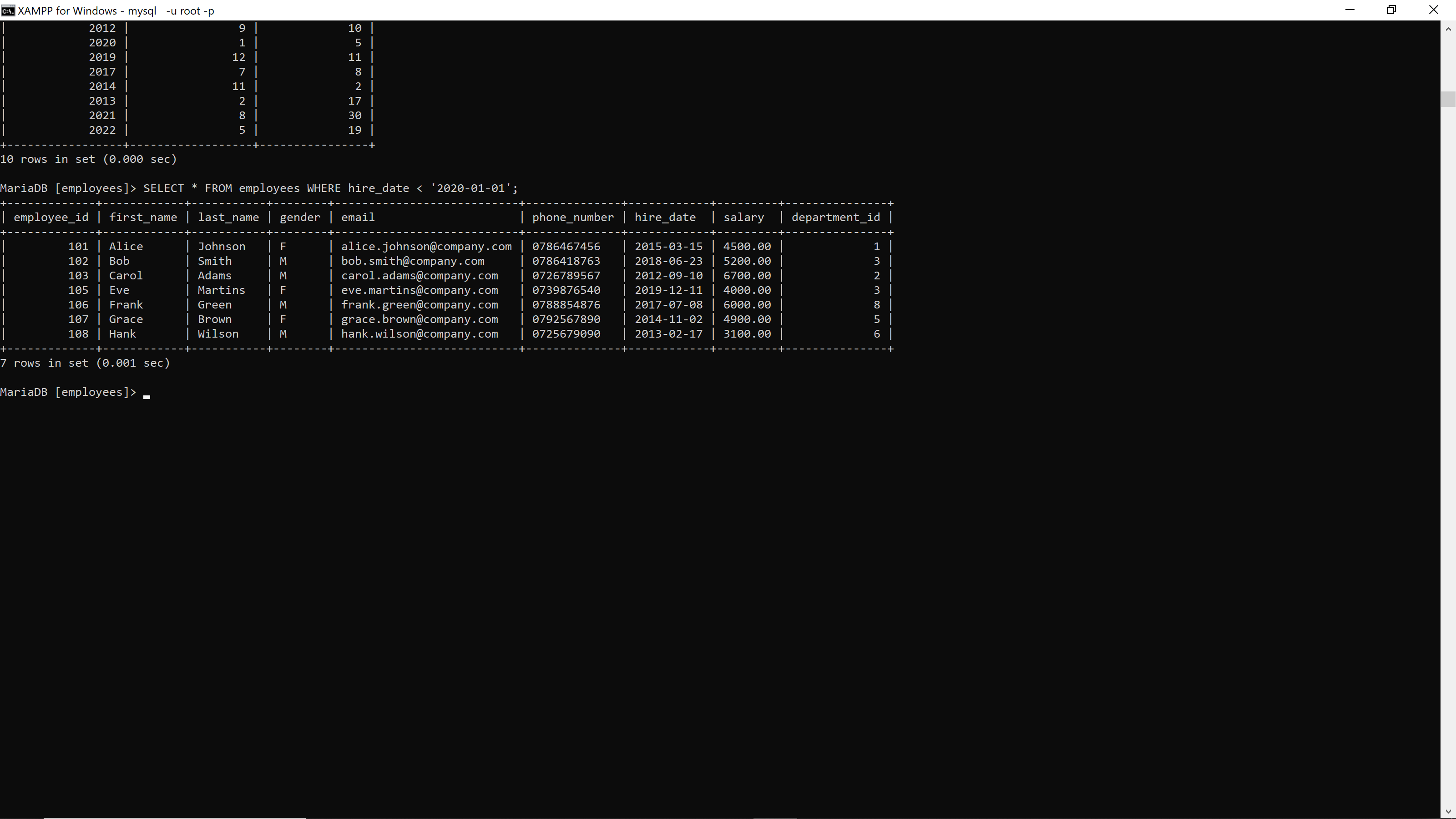
29. SELECT NOW();**29376**

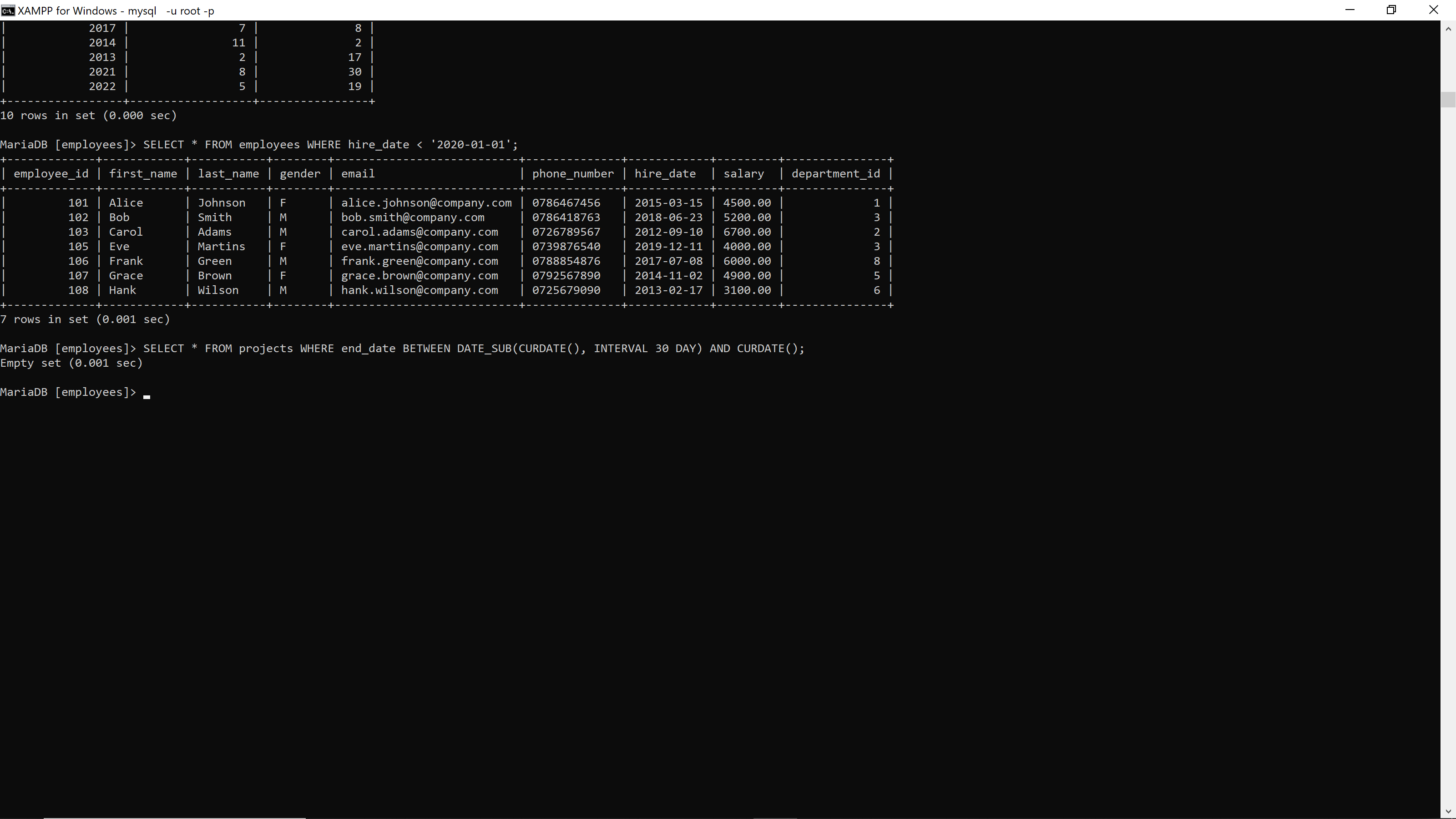


30. SELECT YEAR(hire\_date), MONTH(hire\_date), DAY(hire\_date) FROM employees; **29376**

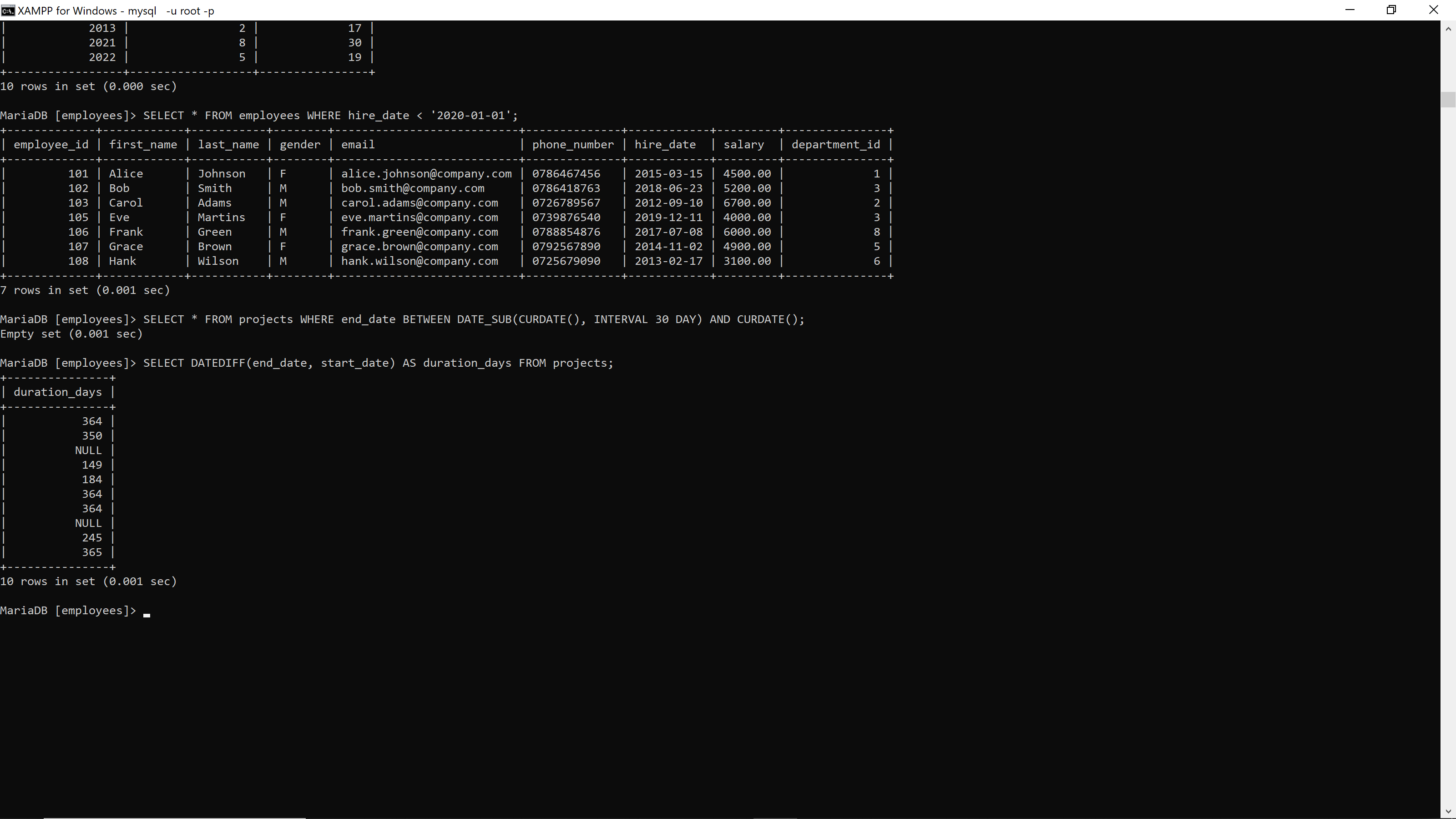


31. SELECT \* FROM employees WHERE hire\_date < '2020-01-01'; **29376**

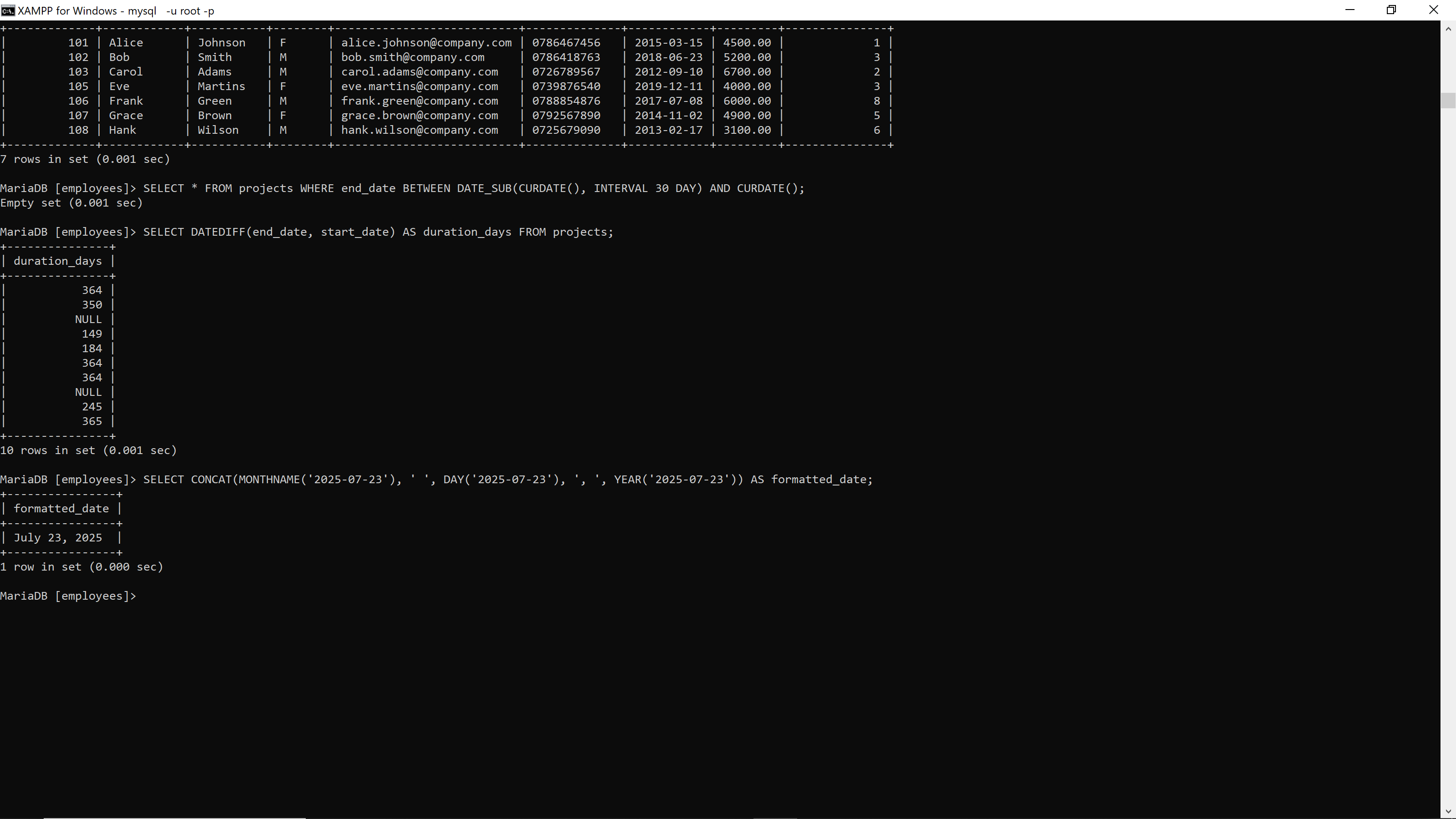


32. SELECT \* FROM projects WHERE end\_date BETWEEN DATE\_SUB(CURDATE(), INTERVAL 30 DAY) AND CURDATE();**29376**

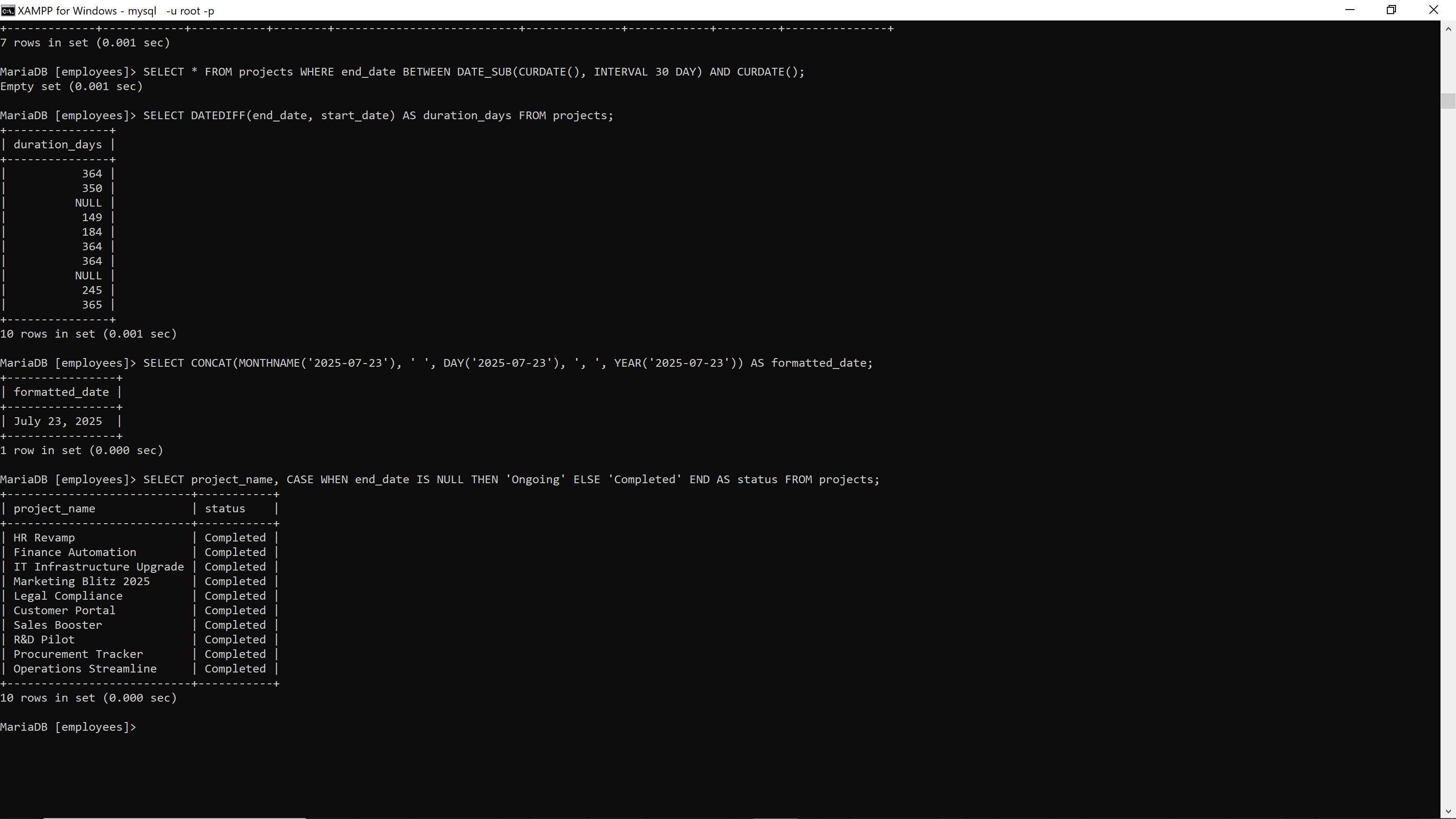
33. SELECT DATEDIFF(end\_date, start\_date) AS duration\_days FROM projects; **29376**



34. SELECT CONCAT(MONTHNAME('2025-07-23'), ' ', DAY('2025-07-23'), ', ', YEAR('2025-07-23')) AS formatted\_date; **29376**

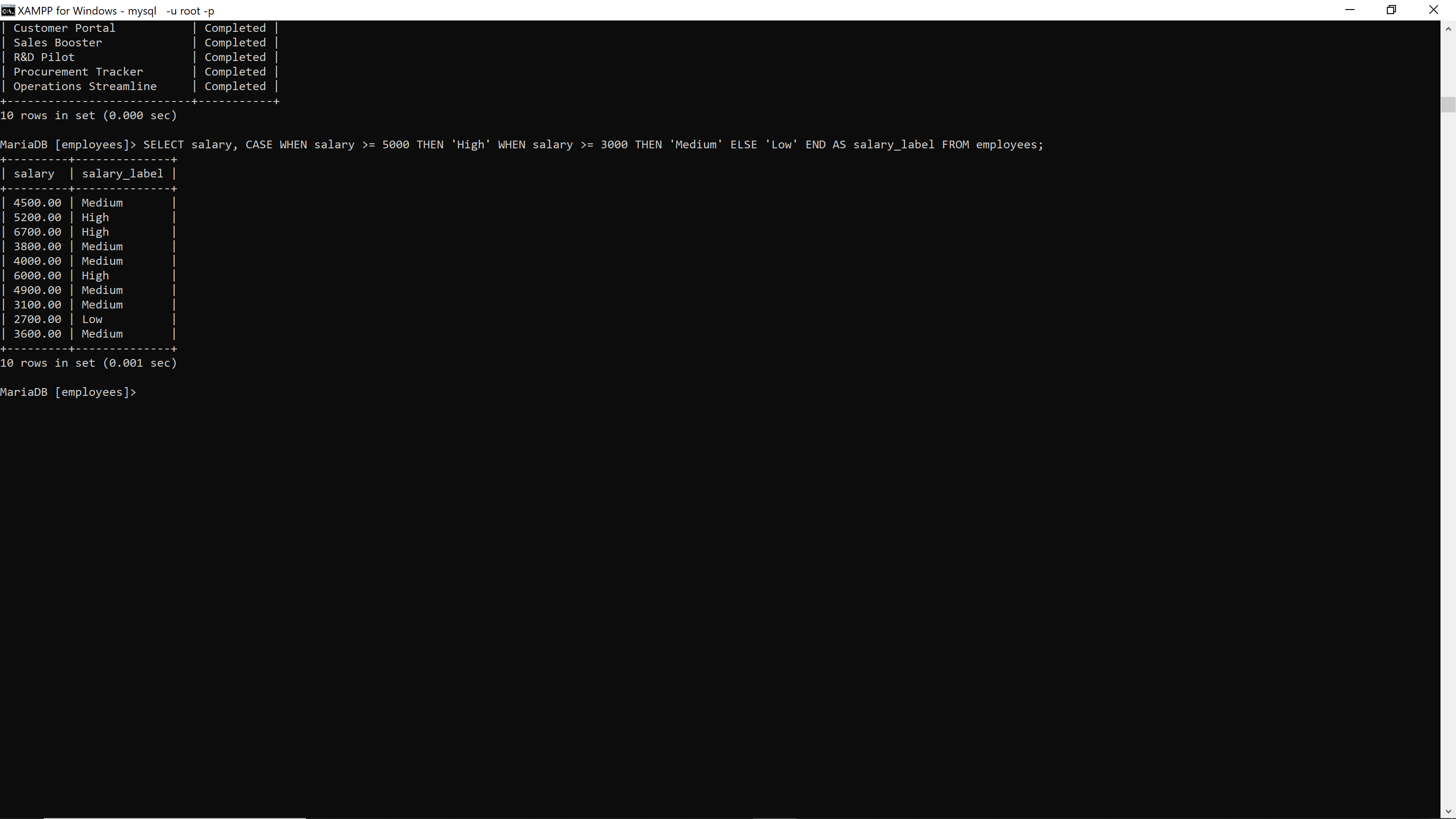


35. SELECT project\_name, CASE WHEN end\_date IS NULL THEN 'Ongoing' ELSE 'Completed' END AS status FROM projects; **29376**

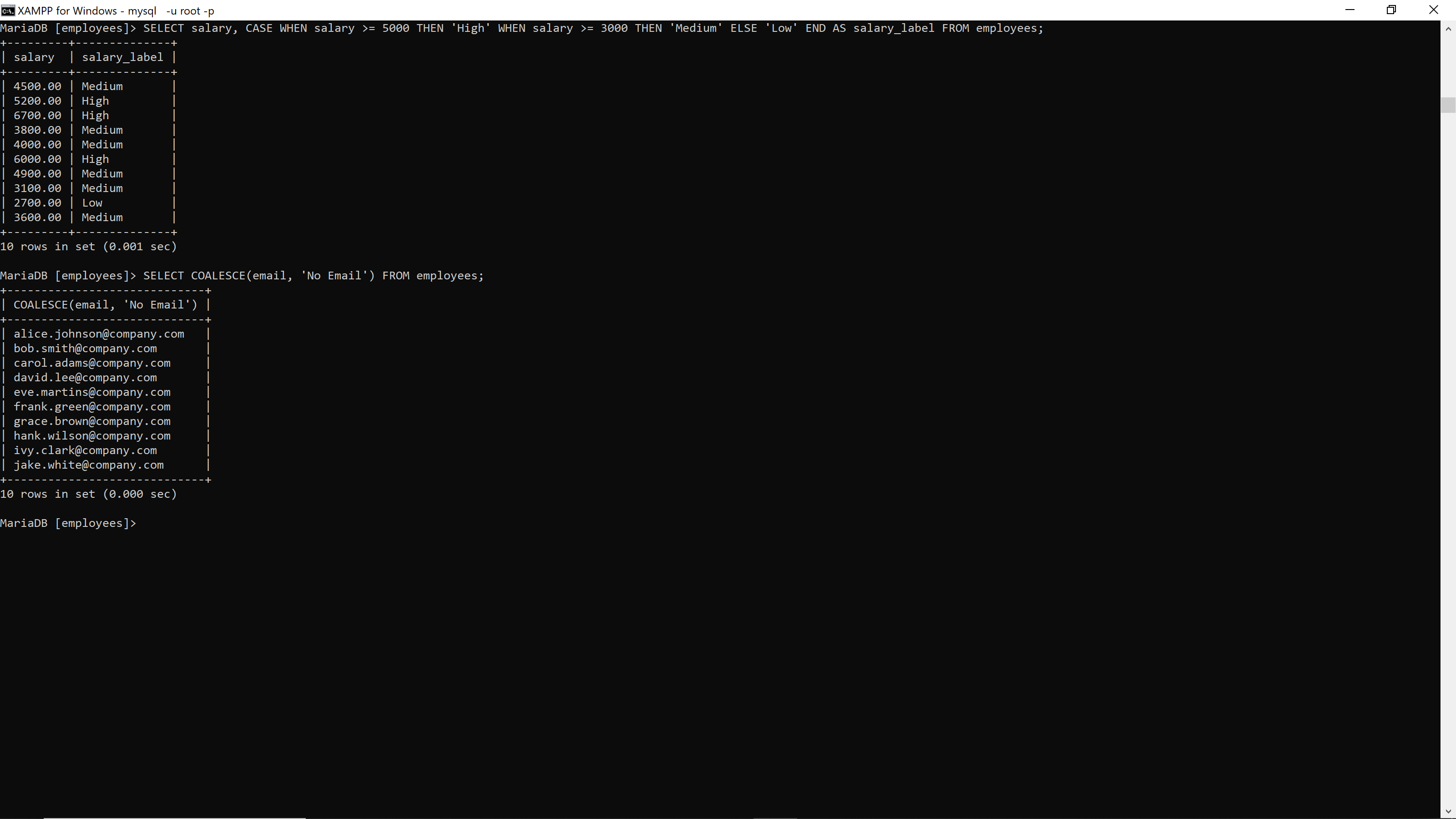


**PART4:Conditional Function**

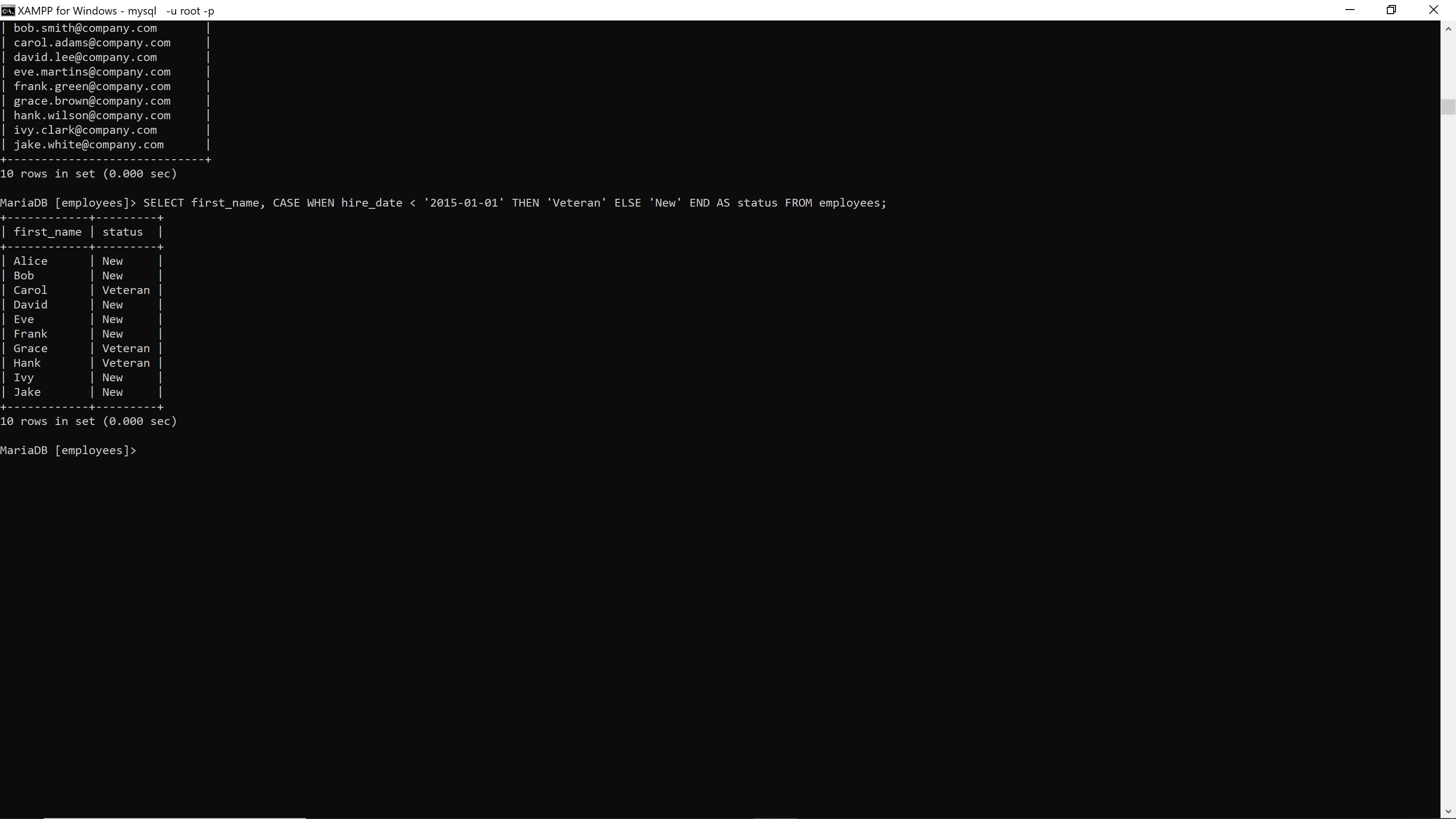
36. SELECT salary, CASE WHEN salary >= 5000 THEN 'High' WHEN salary >= 3000 THEN 'Medium' ELSE 'Low' END AS salary\_label FROM employees; **29376**



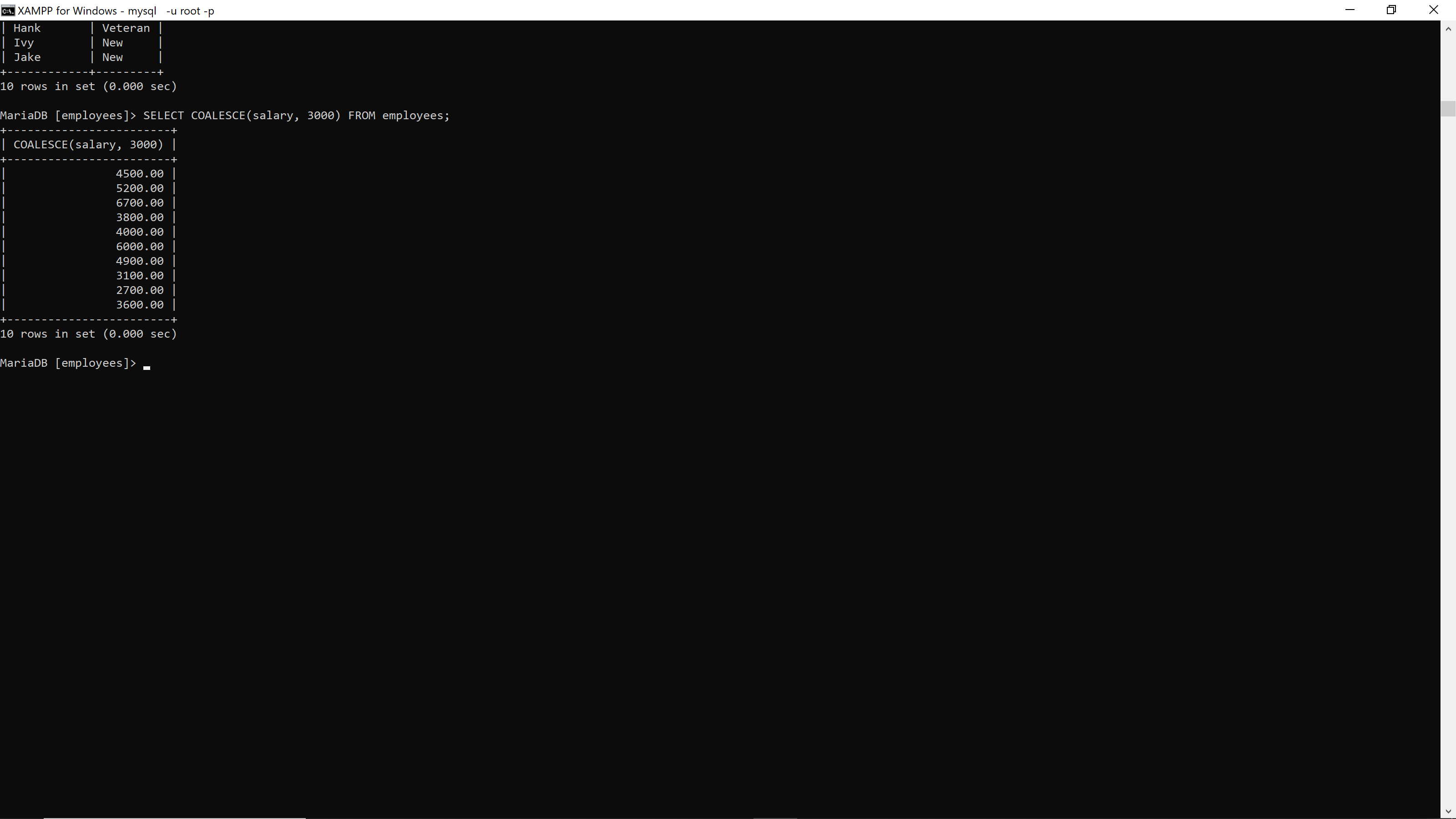
37. SELECT COALESCE(email, 'No Email') FROM employees; **29376**

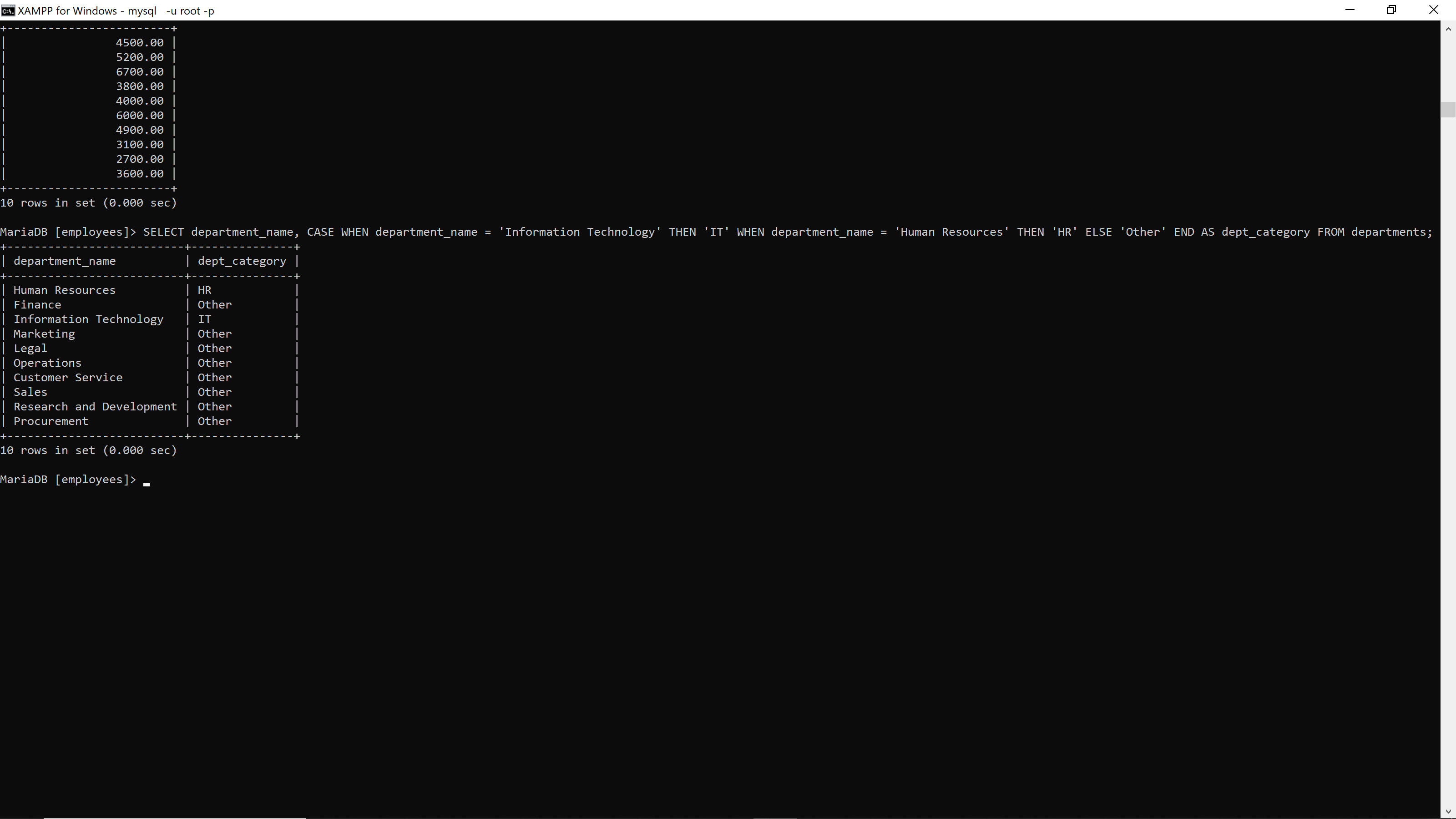


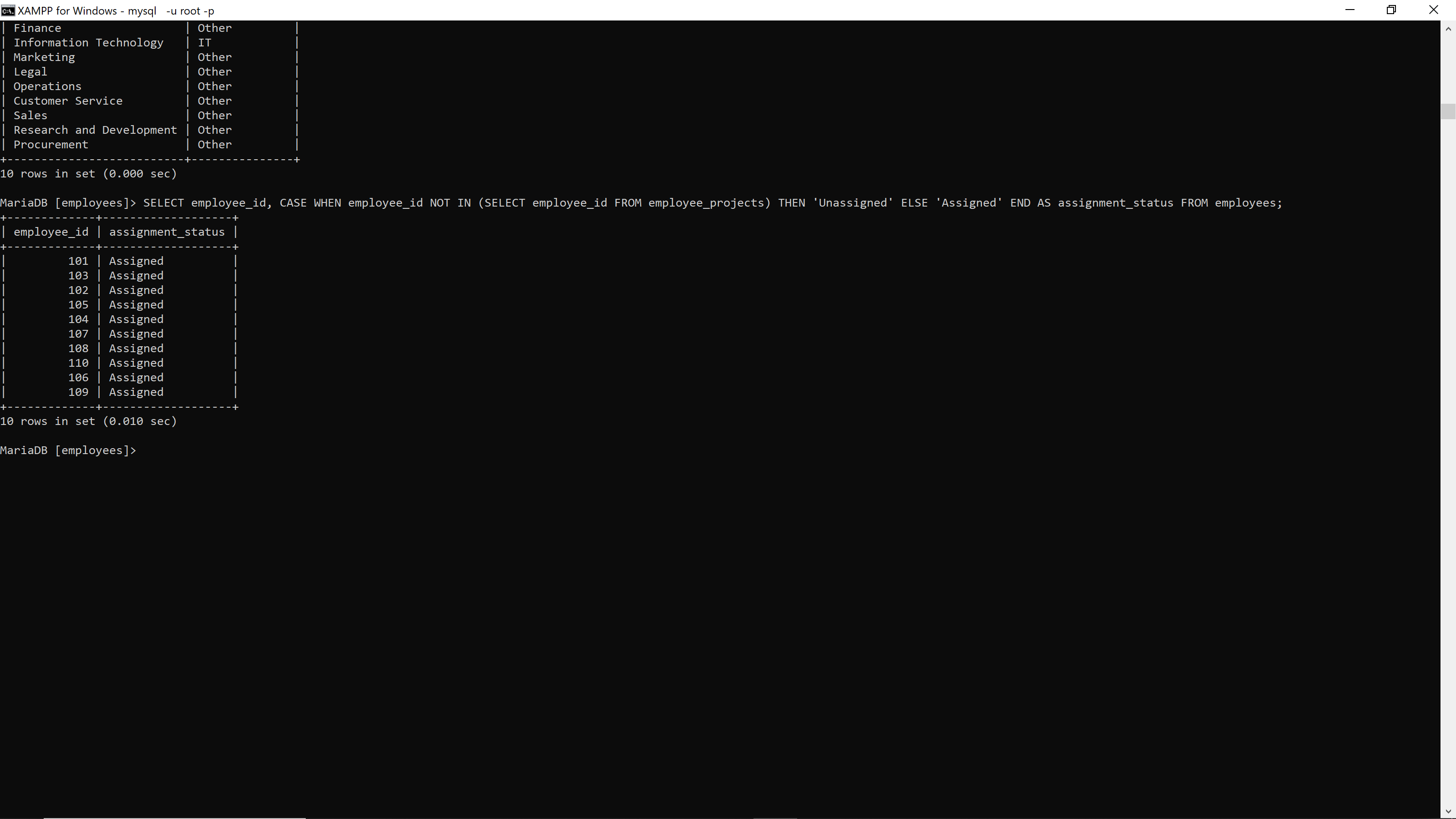
38. SELECT first\_name, CASE WHEN hire\_date < '2015-01-01' THEN 'Veteran' ELSE 'New' END AS status FROM employees; **29376**

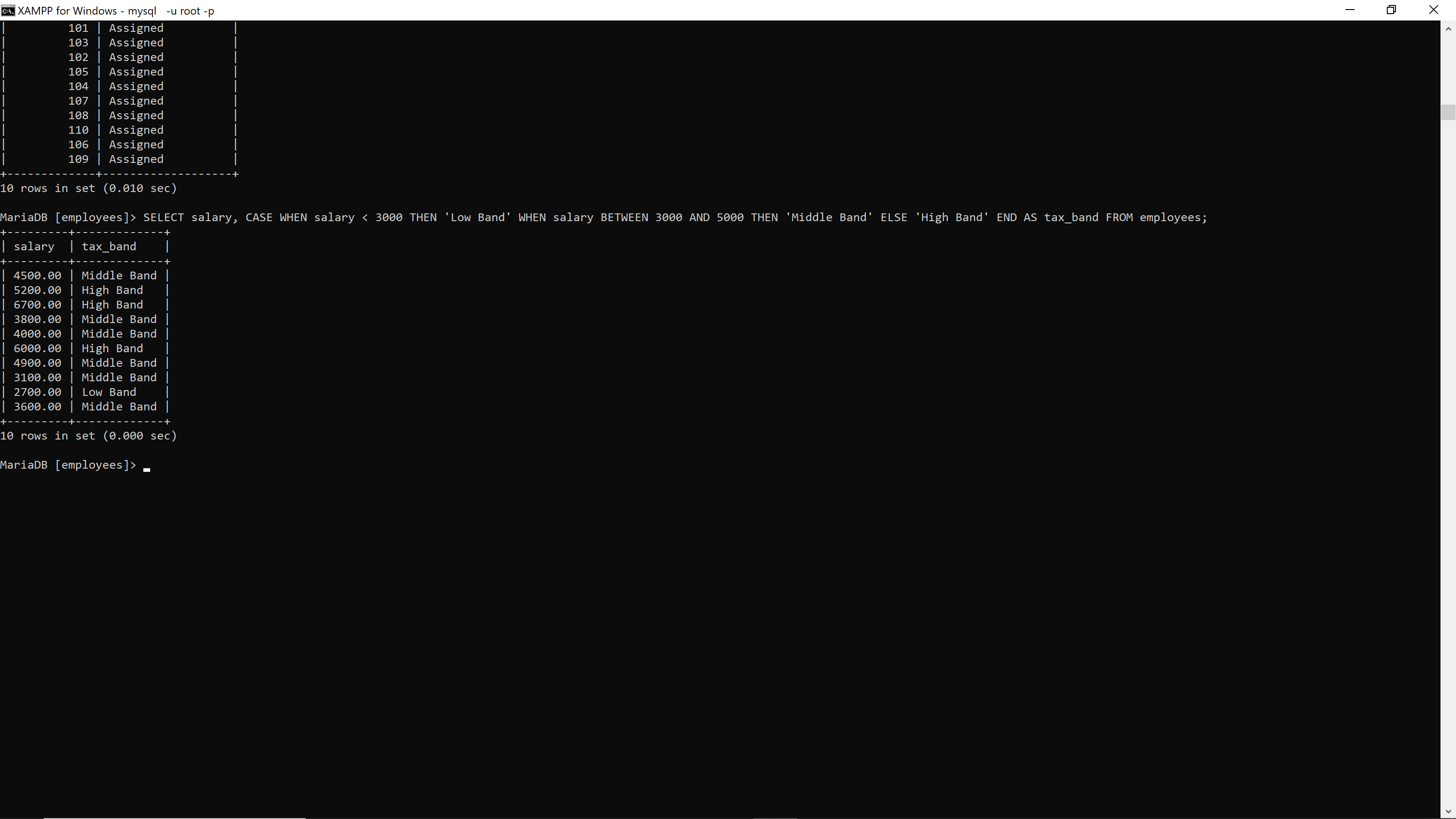


39. SELECT COALESCE(salary, 3000) FROM employees; **29376**

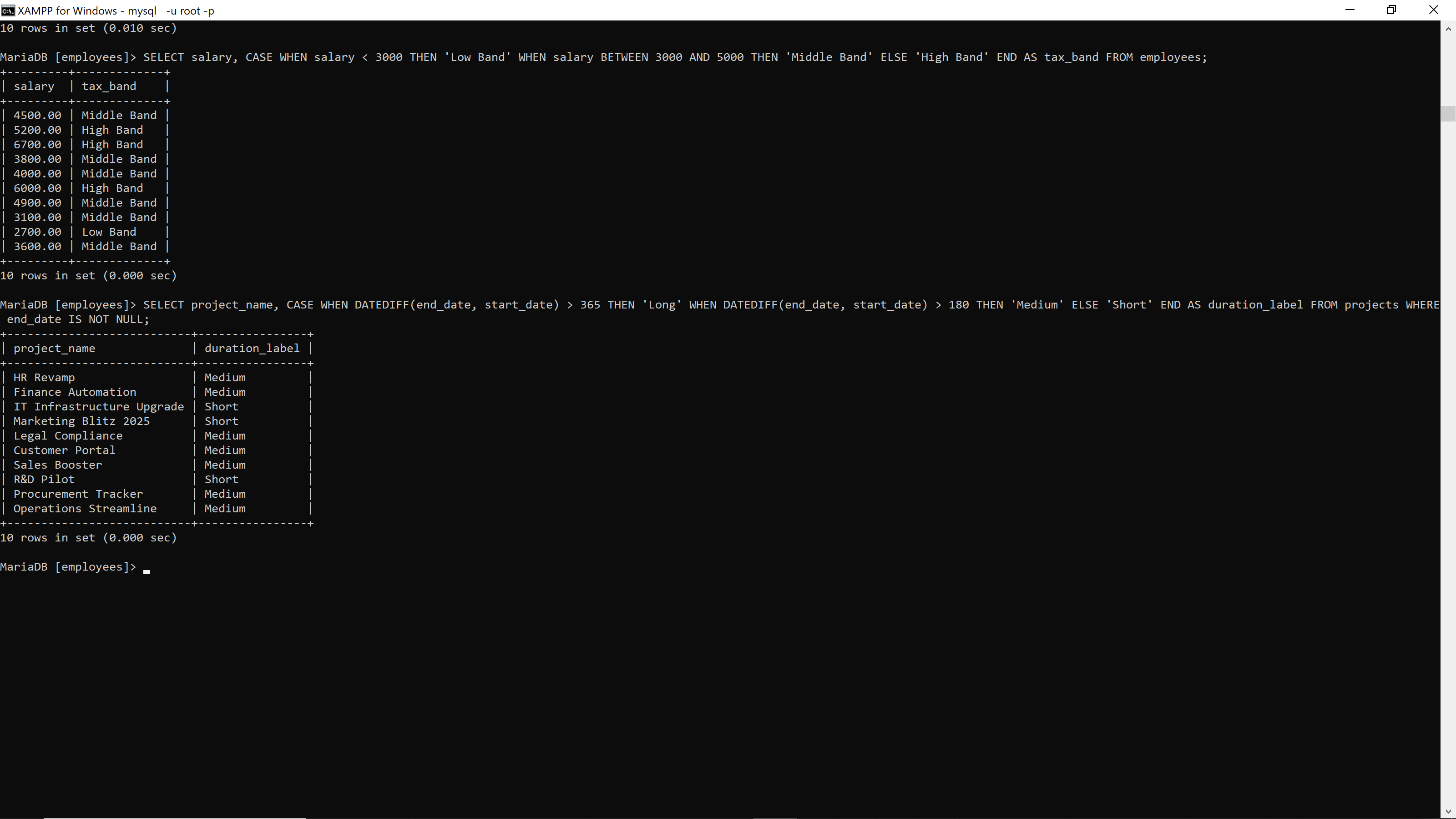


40. SELECT department\_name, CASE WHEN department\_name = 'Information Technology' THEN 'IT' WHEN department\_name = 'Human Resources' THEN 'HR' ELSE 'Other' END AS dept\_category FROM departments; **29376**

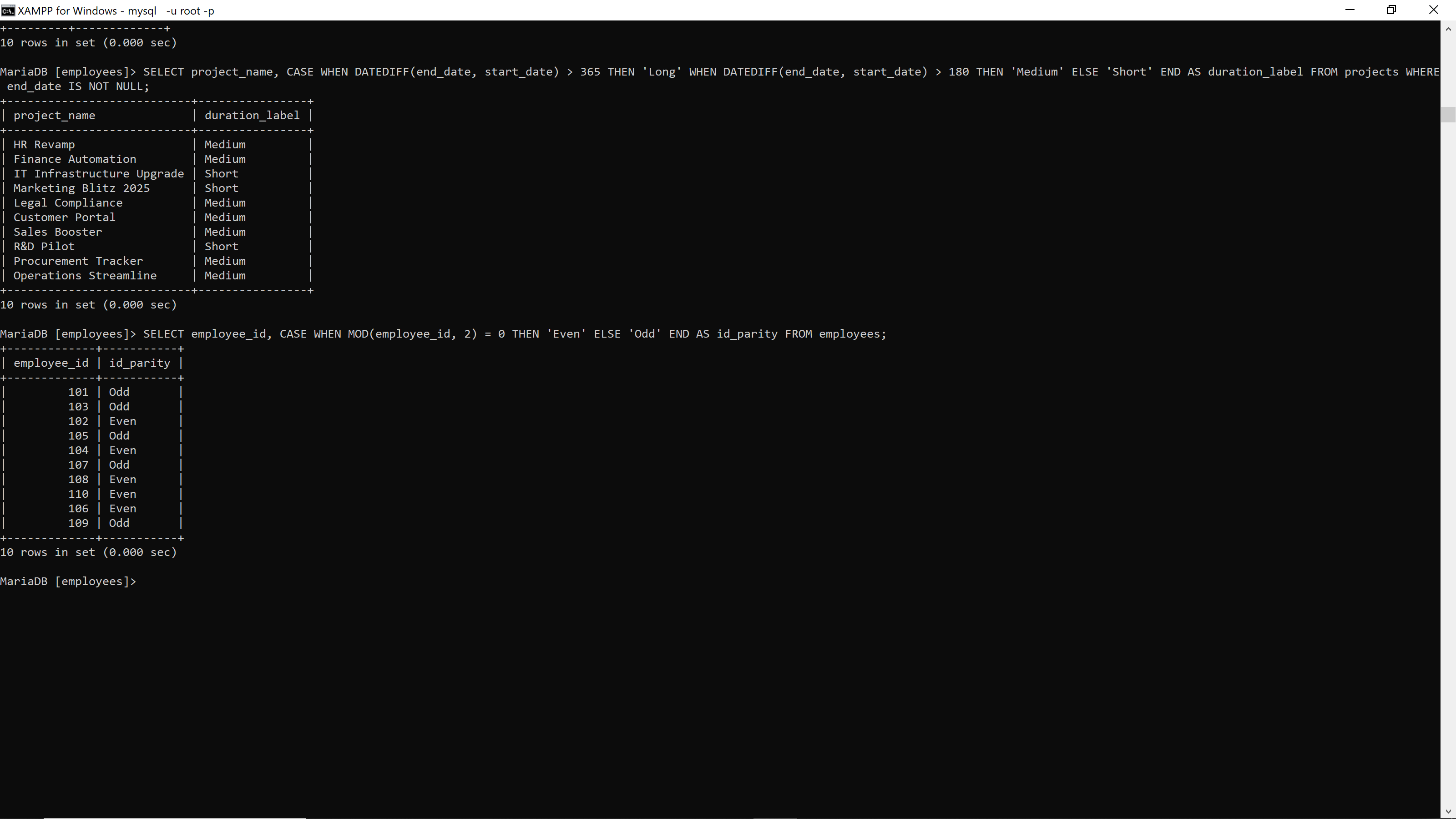
41. SELECT employee\_id, CASE WHEN employee\_id NOT IN (SELECT employee\_id FROM employee\_projects) THEN 'Unassigned' ELSE 'Assigned' END AS assignment\_status FROM employees; **29376**

42. SELECT salary, CASE WHEN salary < 3000 THEN 'Low Band' WHEN salary BETWEEN 3000 AND 5000 THEN 'Middle Band' ELSE 'High Band' END AS tax\_band FROM employees; **29376** 

43. SELECT project\_name, CASE WHEN DATEDIFF(end\_date, start\_date) > 365 THEN 'Long' WHEN DATEDIFF(end\_date, start\_date) > 180 THEN 'Medium' ELSE 'Short' END AS duration\_label FROM projects WHERE end\_date IS NOT NULL; **29376**

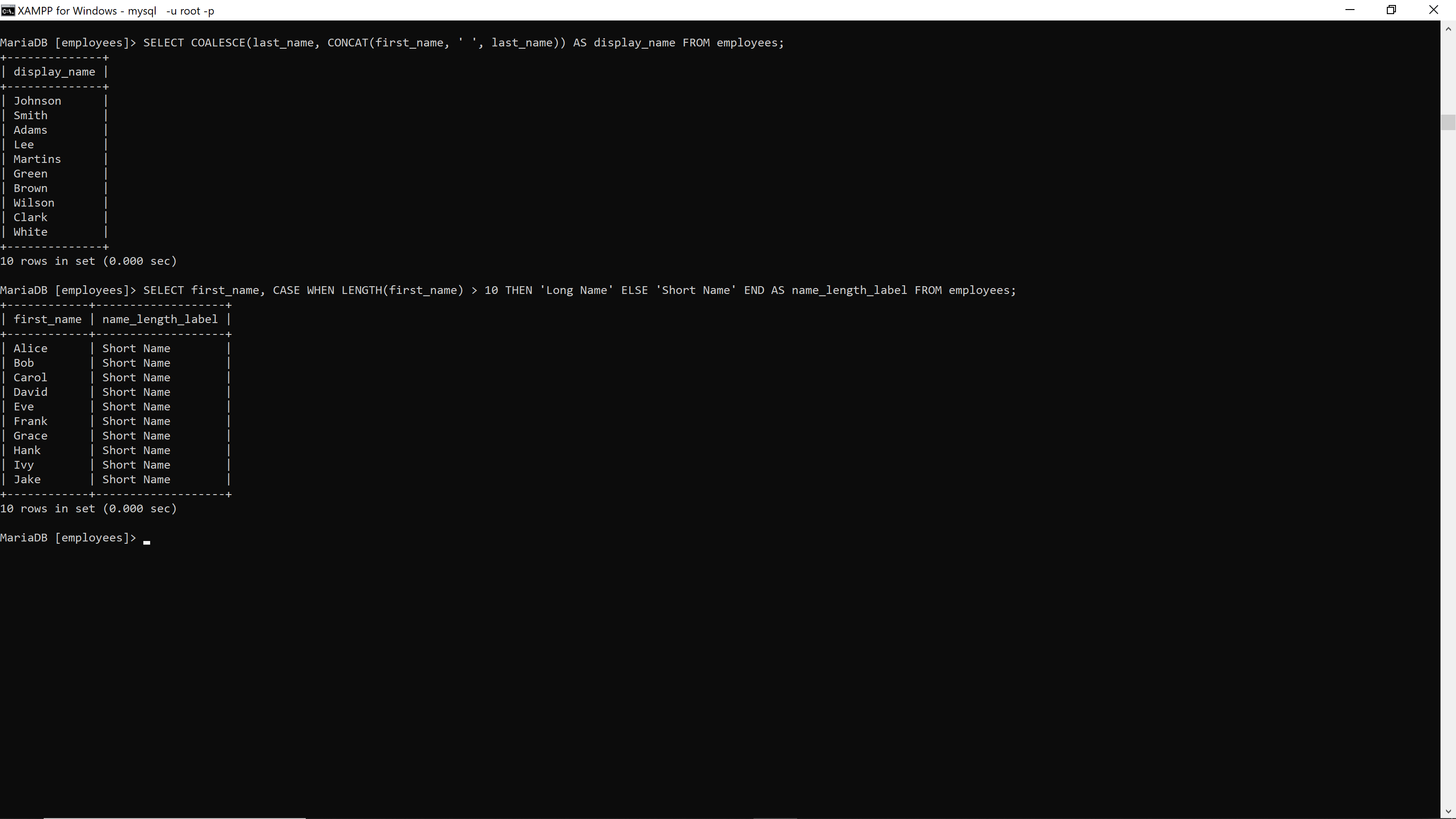


44. SELECT employee\_id, CASE WHEN MOD(employee\_id, 2) = 0 THEN 'Even' ELSE 'Odd' END AS id\_parity FROM employees; **29376**

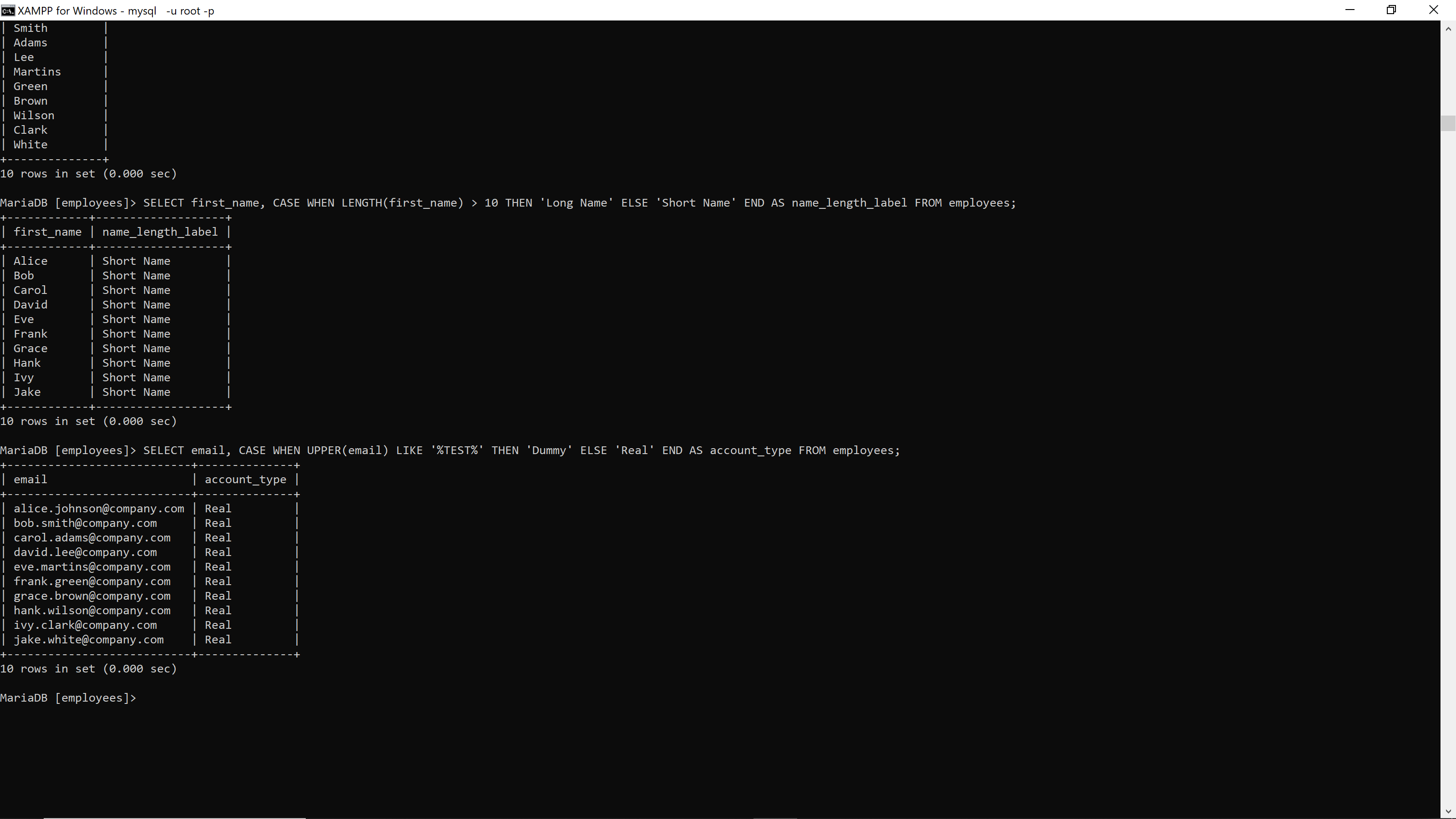


45. SELECT COALESCE(last\_name, CONCAT(first\_name, ' ', last\_name)) AS display\_name FROM employees; **29376**

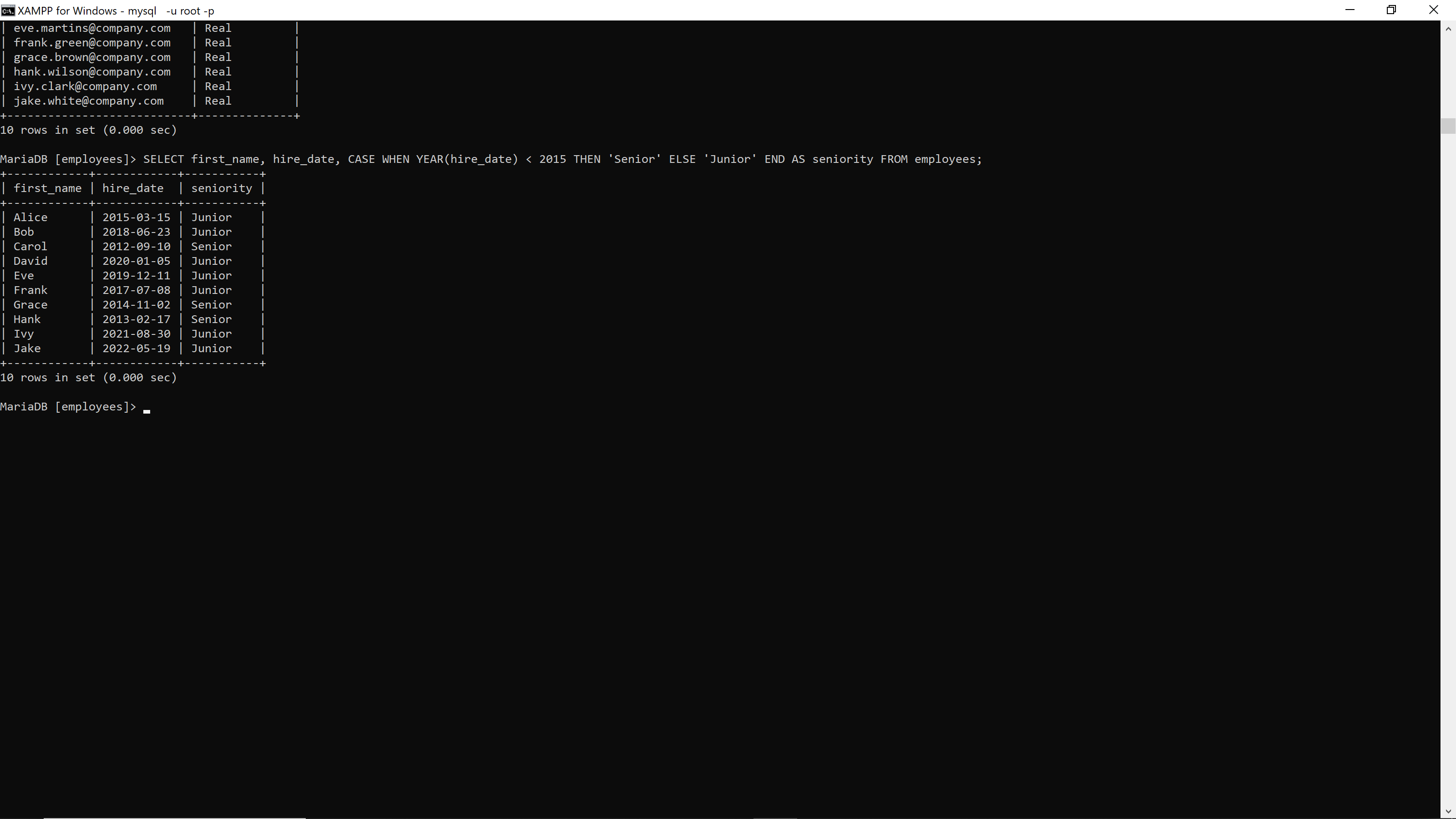


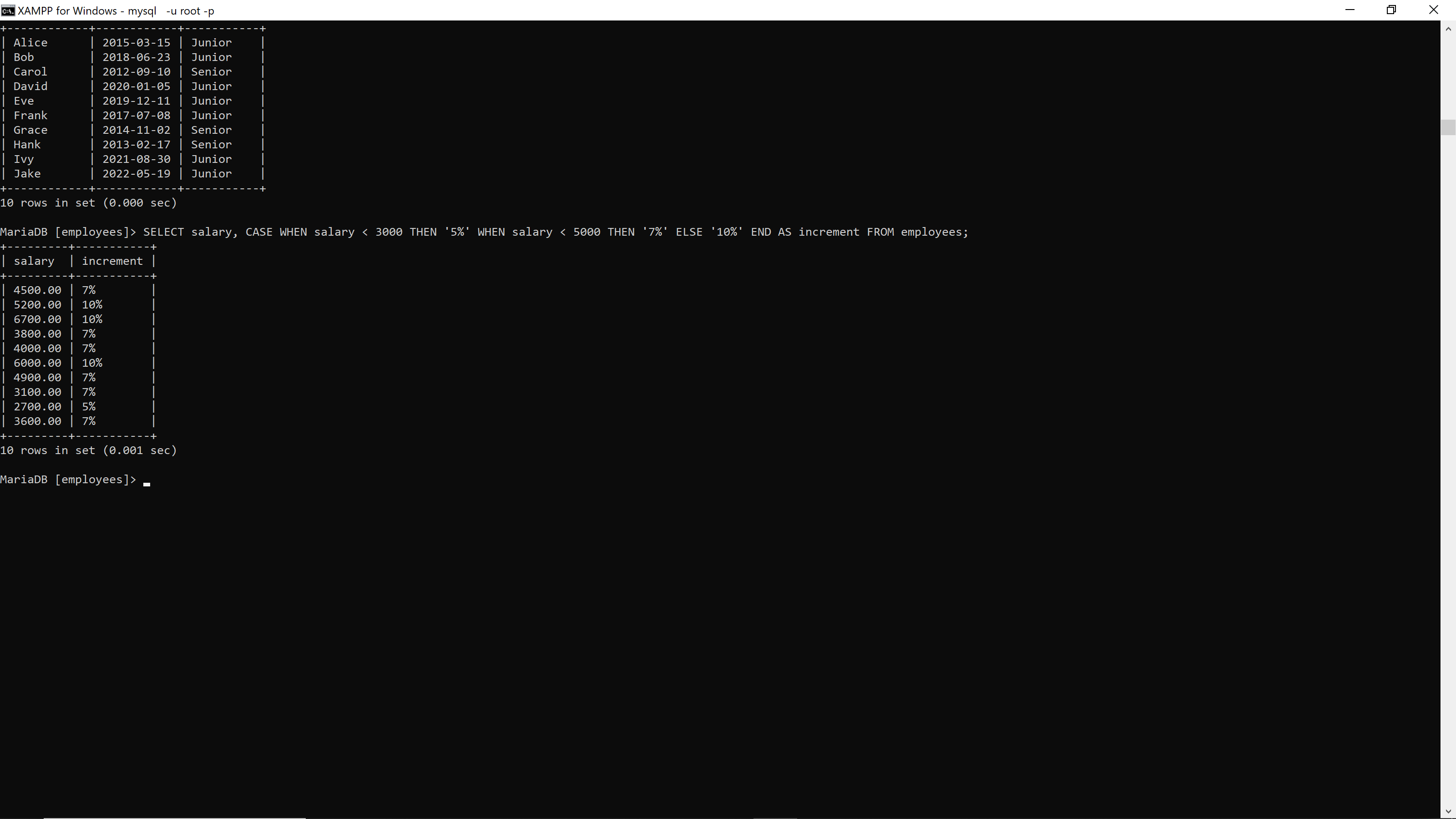
46. SELECT first\_name, CASE WHEN LENGTH(first\_name) > 10 THEN 'Long Name' ELSE 'Short Name' END AS name\_length\_label FROM employees; **29376**

47. SELECT email, CASE WHEN UPPER(email) LIKE '%TEST%' THEN 'Dummy' ELSE 'Real' END AS account\_type FROM employees; **29376**



48. SELECT first\_name, hire\_date, CASE WHEN YEAR(hire\_date) < 2015 THEN 'Senior' ELSE 'Junior' END AS seniority FROM employees; **29376**



49. SELECT salary, CASE WHEN salary < 3000 THEN '5%' WHEN salary < 5000 THEN '7%' ELSE '10%' END AS increment FROM employees; **29376**

50. SELECT first\_name, CASE WHEN MONTH(hire\_date) = MONTH(CURDATE()) THEN 'Anniversary Month' ELSE 'Regular Month' END AS hire\_anniversary FROM employees; **29376**