Coding Challenge Questions : My SQL

	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12.00.00	Banking
2	Michael	Clarke	800000	2013-01-01 12.00.00	Insurance
3	Roy	Thomas	700000	2013-02-01 12.00.00	Banking
4	Tom	Jose	600000	2013-02-01 12.00.00	Insurance
5	Jerry	Pinto	650000	2013-02-01 12.00.00	Insurance
6	Philip	Mathew	750000	2013-02-01 12.00.00	Services
7	Towino	Thomas	650000	2013-01-01 12.00.00	Services
8	Jeffin	Jose	600000	2013-02-01 12.00.00	Insurance

Table Name : Incentives

EMPLOYEE_REF_ID	INCENTIVE_DATE	INCENTIVE_AMOUNT
1	2013-02-01	5000
2	2013-02-01	3000
3	2013-02-01	4000
4	2013-01-01	4500
5	2013-01-01	3500

1. Get all employee details from the employee table

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance

2. Get First_Name,Last_Name from employee table

FIRST_NAME	LAST_NAME
John	Abraham
Michael	Clarke
Roy	Thomas
Tom	Jose
Jerry	Pinto
Philip	Mathew
Towino	Thomas
Jeffin	Jose
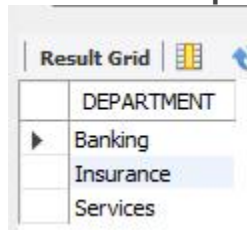
3. Get First_Name from employee table in upper case

upper(FIRST_NAME)
JOHN
MICHAEL
ROY
TOM
JERRY
PHILIP
TOWINO
JEFFIN

4. Get First_Name from employee table in lower case

lower(FIRST_NAME)
john
michael
roy
tom
jerry
philip
towino
jeffin
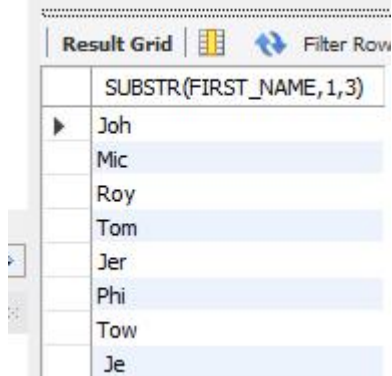
5. Get unique DEPARTMENT from employee table

DEPARTMENT
▶ Banking
Insurance
Services

6. Select first 3 characters of FIRST_NAME from EMPLOYEE

SUBSTR(FIRST_NAME,1,3)
▶ Joh
Mic
Roy
Tom
Jer
Phi
Tow
Je
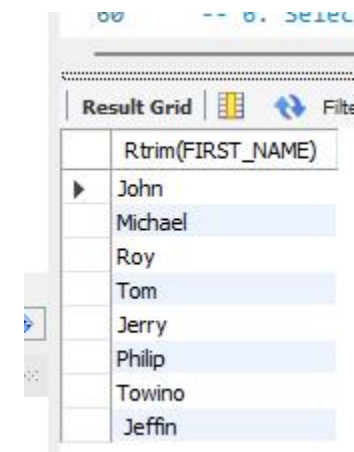
7. Get position of 'o' in name 'John' from employee table

MatchPosition
▶ 2

8. Get FIRST_NAME from employee table after removing white spaces from right side

Rtrim(FIRST_NAME)
▶ John
Michael
Roy
Tom
Jerry
Philip
Towino
Jeffin

9. **Get FIRST_NAME from employee table after removing white spaces from left side**

ltrim(FIRST_NAME)
John
Michael
Roy
Tom
Jerry
Philip
Towino
Jeffin
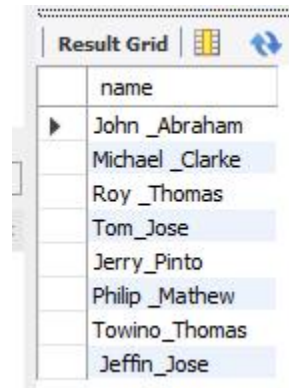
10. **Get length of FIRST_NAME from employee table**

length
5
8
4
3
5
7
6
7

11. **Get First_Name from employee table after replacing 'o' with '$'**

replacingcharcter
J$hn
Michael
R$y
T$m
Jerry
Philip
Twin
Jeffin
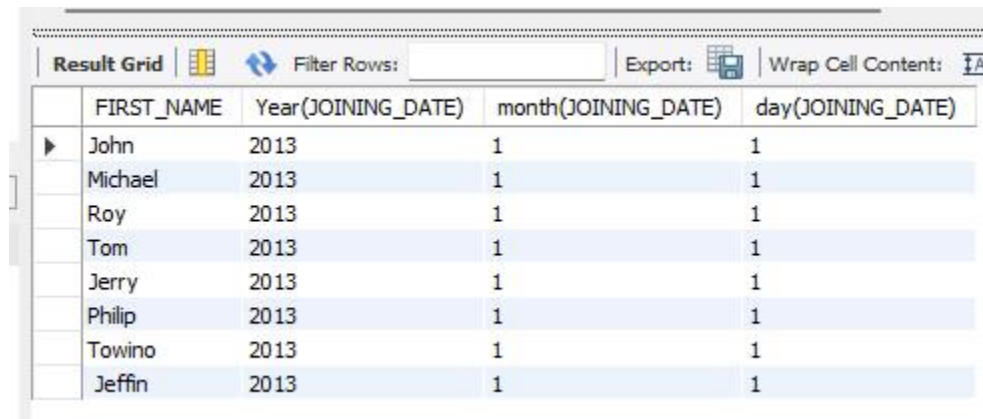
12. **Get First_Name and Last_Name as single column from employee table separated by a '_'**

name
▶ John _Abraham
Michael _Clarke
Roy _Thomas
Tom_Jose
Jerry_Pinto
Philip _Mathew
Towino_Thomas
Jeffin_Jose

13. **Get FIRST_NAME ,Joining year,Joining Month and Joining Date from employee table**

FIRST_NAME	Year(JOINING_DATE)	month(JOINING_DATE)	day(JOINING_DATE)
▶ John	2013	1	1
Michael	2013	1	1
Roy	2013	1	1
Tom	2013	1	1
Jerry	2013	1	1
Philip	2013	1	1
Towino	2013	1	1
Jeffin	2013	1	1

14. **Get all employee details from the employee table order by First_Name Ascending**

FIRST_NAME
▶ Jeffin
Jerry
John
Michael
Philip
Roy
Tom
Towino

15. **Get all employee details from the employee table order by First_Name descending**

FIRST_NAME
▶ Towino
Tom
Roy
Philip
Michael
John
Jerry
Jeffin

16. Get all employee details from the employee table order by First_Name Ascending and Salary descending

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
▶ 8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services

17. Get employee details from employee table whose employee name is "John"

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	INCENTIVE_AMOUNT
▶ 1	John	Abraham	1000000	2013-01-01 12:00:00	Banking	5000

18. Get employee details from employee table whose employee name are "John" and "Roy"

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
▶ 1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking

19. Get employee details from employee table whose employee name are not "John" and "Roy"

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance

20. Get employee details from employee table whose first name ends with 'n' and name contains 4 letters

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	INCENTIVE_AMOUNT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking	5000

21. Get employee details from employee table whose first name starts with 'J' and name contains 4 letters

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	INCENTIVE_AMOUNT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking	5000

22. Get employee details from employee table whose Salary greater than 600000

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services

23. Get employee details from employee table whose Salary less than 800000

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance

24. Get employee details from employee table whose Salary between 500000 and 800000

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	00	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance

25. Get employee details from employee table whose name is 'John' and 'Michael'

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance

26. Get employee details from employee table whose joining year is "2013"

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance

27. Get employee details from employee table whose joining month is "January"

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance

28. Get employee details from employee table who joined before January 1st 2013

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance
NULL	NULL	NULL	NULL	NULL	NULL

29. Get employee details from employee table who joined after January 31st

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
NULL	NULL	NULL	NULL	NULL	NULL
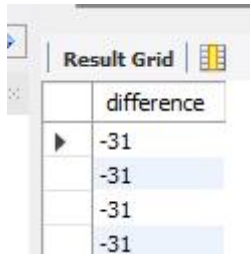
30. Get Joining Date and Time from employee table

date(JOINING_DATE)	time(JOINING_DATE)
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00

31. Get Joining Date,Time including milliseconds from employee table

date(JOINING_DATE)	milliseconds
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
2013-01-01	12:00:00
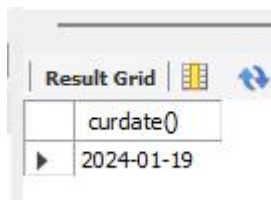
32. Get difference between JOINING_DATE and INCENTIVE_DATE from employee and incentives table

difference
-31
-31
-31
-31
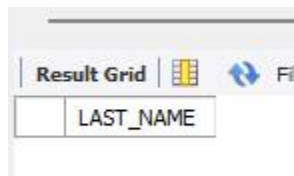
33. Get current date

curdate()
2024-01-19
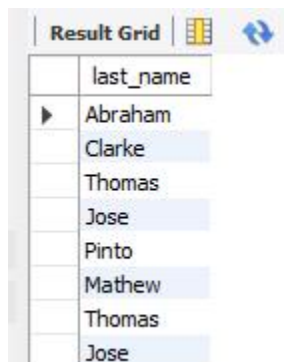
34. Get names of employees from employee table who has '%' in Last_Name. Tip : Escape character for special characters in a query.
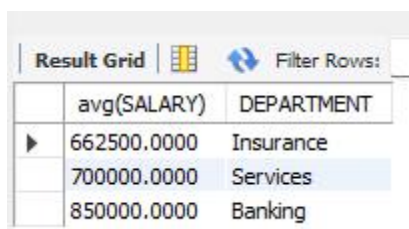
LAST_NAME

35. Get Last Name from employee table after replacing special character with white space

last_name
Abraham
Clarke
Thomas
Jose
Pinto
Mathew
Thomas
Jose
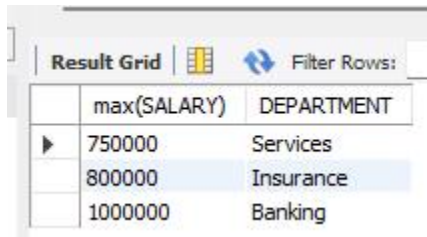
36. Get department wise average salary from employee table order by salary ascending

avg(SALARY)	DEPARTMENT
662500.0000	Insurance
700000.0000	Services
850000.0000	Banking
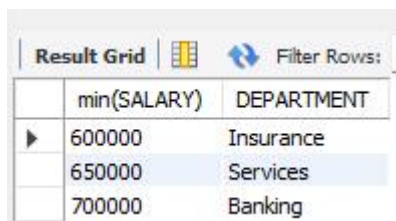
37. **Get department wise maximum salary from employee table order by salary ascending**

max(SALARY)	DEPARTMENT
750000	Services
800000	Insurance
1000000	Banking
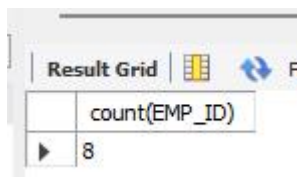
38. **Get department wise minimum salary from employee table order by salary ascending**

min(SALARY)	DEPARTMENT
600000	Insurance
650000	Services
700000	Banking
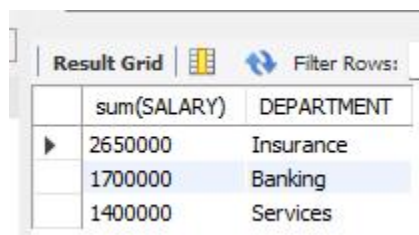
39. **Select no of employees joined with respect to year and month from employee table**

count(EMP_ID)
8
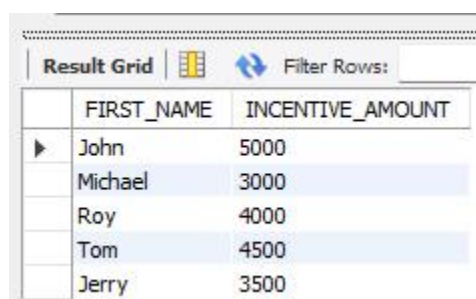
40. **Select department,total salary with respect to a department from employee table where total salary greater than 800000 order by Total_Salary descending**

sum(SALARY)	DEPARTMENT
2650000	Insurance
1700000	Banking
1400000	Services

41. **Select first_name, incentive amount from employee and incentives table for those employees who have incentives**

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Michael	3000
Roy	4000
Tom	4500
Jerry	3500

42. **Select first_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000**

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Roy	4000
Tom	4500
Jerry	3500

43. **Select first_name, incentive amount from employee and incentives table for all employes even if they didn't get incentives**

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Michael	3000
Roy	4000
Tom	4500
Jerry	3500
Philip	NULL
Towino	NULL
Jeffin	NULL

44. **Select first_name, incentive amount from employee and incentives table for all employees even if they didn't get incentives and set incentive amount as 0 for those employees who didn't get incentives.**

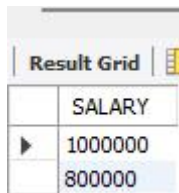| EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	INCENTIVE_AMOUNT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking	8000
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance	3000
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking	4000
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance	4500
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance	3500
6	Philip	Mathew	750000	2013-01-01 12:00:00	Services	0
7	Towino	Thomas	650000	2013-01-01 12:00:00	Services	0
8	Jeffin	Jose	600000	2013-01-01 12:00:00	Insurance	0

45. Select first_name, incentive amount from employee and incentives table for all employees who got incentives using left join

FIRST_NAME	INCENTIVE_AMOUNT
John	5000
Michael	3000
Roy	4000
Tom	4500
Jerry	3500
Philip	NULL
Towino	NULL
Jeffin	NULL

46. Select max incentive with respect to employee from employee and incentives table using sub query

max(INCENTIVE_AMOUNT)
5000

47. Select TOP 2 salary from employee table

SALARY
▶ 1000000
800000
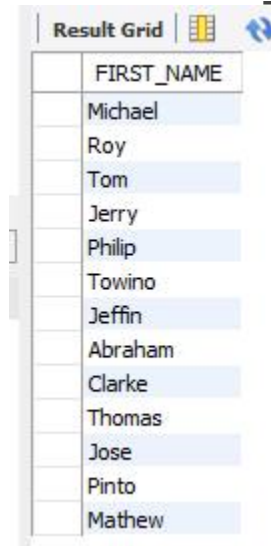
Result Grid

48. Select 2nd Highest salary from employee table

Result Grid — Filter Ro

2nd_Highest_salary
▶ 800000

49. Select First_Name, LAST_NAME from employee table as separate rows

Result Grid

FIRST_NAME
Michael
Roy
Tom
Jerry
Philip
Towino
Jeffin
Abraham
Clarke
Thomas
Jose
Pinto
Mathew

50. Select employee details from employee table if data exists in incentive table ?

Result Grid — Filter Rows: _____ Edit: — Export/Import: — Wrap Cell Conten

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	INCENTIVE_AMOUNT
▶ 1	John	Abraham	1000000	2013-01-01 12:00:00	Banking	5000
2	Michael	Clarke	800000	2013-01-01 12:00:00	Insurance	3000
3	Roy	Thomas	700000	2013-01-01 12:00:00	Banking	4000
4	Tom	Jose	600000	2013-01-01 12:00:00	Insurance	4500
5	Jerry	Pinto	650000	2013-01-01 12:00:00	Insurance	3500

51. Select 20 % of salary from John , 10% of Salary for Roy and for other 15 % of salary from employee table

FIRST_NAME	Amount
John	200000.0
Michael	120000.00
Roy	70000.00
Tom	90000.00
Jerry	97500.00
Philip	112500.00
Towino	97500.00
Jeffin	90000.00

52. **Select Banking as 'Bank Dept', Insurance as 'Insurance Dept' and Services as 'Services Dept' from employee table**

Department
Bank Dept
Insurance Dept
Services Dept

53. **Delete employee data from employee table who got incentives in incentive table**

54. **Insert into employee table Last Name with " ' " (Single Quote - Special Character**

last_name
Abraham'
Clarke'
Thomas'
Jose'
Pinto'
Mathew'
Thomas'
Jose'

55. **Update incentive table where employee name is 'John'**

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	INCENTIVE_AMOUNT
1	John	Abraham	1000000	2013-01-01 12:00:00	Banking	8000