



IBM DB2 SQL & SQL/PL Exercises and Bugs

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1. DBL and DML

1. Execute the db2_tables.sql script?
2. Write a query to add column "GENDER" data type is CHAR(1). use "CHECK" constraint to check whether the gender is 'M' or 'F'. Other than 'M' or 'F' it shouldn't be accept value?
3. Write a query to increase the length of the column "EMP_NAME" to '15'?
4. Write a query to add constraint "PRIMARY KEY" to column EMP_NO?
5. Write a query to delete column "GENDER"?
6. Fix errors in db2_insert.sql script?

2. Built-In-Functions

7. Write a query to print 'miracle' in uppercase?
8. Write a query to print only 'Miracle' from the string 'Miracle Software Systems' using substr?
9. Write a query to add words 'miracle' 'software' 'systems'?
10. Write a query to find the position of first 'S' in 'miracle software systems'?
11. Write a query to get the current date?
12. Write a query to get current time stamp?
13. Write a query to get current time?
14. Write a query to get number of employees in emp table?
15. Write a query to get average of employees salary in emp table?
16. Write a query to get maximum salary in emp table?
17. Write a query to get minimum salary in emp table?
18. Write a query to get sum of total salary in emp table?
19. Write a query to eliminate the spaces at the beginning of the particular word: ' miracle'?
20. Write a query to eliminate the spaces at the end of the particular word: 'miracle '?
21. To list all the employees whose names are having just 5 characters as length?
22. Display the number of male employees in the employee table department wise?
23. Write a query to find 4th max salary from EMP table?

3. Joins and Set Operators

24. Write a query to demonstrate the left outer join on 2 tables?
25. Write a sample query using UNION operator?
26. Write a sample query using EXCEPT operator?
27. Write a sample query using INTERSECT ALL operator?

4. Index and Views

28. Write a query to create index on columns EMP_NO, EMP_NAME of table EMP?
29. Write a query to drop index on EMP table?
30. Write a query to drop view on EMP table?

5. Sequences

31. Add a column TOTAL_SALARY data type INT to EMP table. Scenario : Generate a value (SALARY + COMM) into the column TOTAL_SALARY when any Insert or Update takes in the table EMP?
32. Create a sequence and use that sequence in multiple tables?

6. SQL/PL

33. Write a procedure on EMP table that takes all the values from the user and perform Insert?

34. Create a function that will give employee name who is getting max salary. Also display his salary?
35. Write a procedure on EMP table that takes all the values from the user and perform Insert or Update? If the employee ID is found in the table performs Update otherwise perform Insert?
36. Write a Trigger on the below scenario?
TABLE-1: T_CUSTOMER (AC_ID VARCHAR(12) PRIMARY KEY, NAME VARCHAR(30), TOTAL_AMOUNT DECIMAL(12,2))
TABLE-2: T_TRANS (TRAN_ID VARCHAR(12) PRIMARY KEY, AC_ID VARCHAR(12) not null, TRAN_DATE DATE, DEPOSIT DECIMAL(12,2), WITHDRAW DECIMAL(12,2))
Scenario: All the debit or credit amounts will store in T_TRANS table. If a person deposited some amount, credit the deposited amount to Total Amount in T_CUSTOMER table OR if the person withdraw some amount, debit the withdraw amount from the Total Amount in T_CUSTOMER tables.