DBMS : Assignment – 26.02.2021

Consider the following employee table and execute the queries based on it

EMPID	F_NAME	L_NAME	JOB_TYPE	SALARY	COMMISION	D_NAME	MANAGER_ID	DOJ
1	arun	khan	manager	90000		production		04-jan-1998
2	barun	kumar	manager	80000		marketing		09-feb-1998
3	chitra	kapoor	engineer	60000		production	1	08-jan-1998
4	dheeraj	mishra	manager	75000		sales	4	27-dec-2001
5	emma	dutt	engineer	55000		production	1	20-mar-2002
6	floki	dutt	accountant	70000		accounts		16-jul-2000
7	dheeraj	kumar	clerk	40000		accounts	6	01-jul-2016
8	soul	sood	engineer	60000		rnd		06-sep-2014
9	mou	bhat	clerk	30000		sales	4	08-mar-2018
10	sunny	deol	salesman	20000	10000	marketing	2	31-mar-2001
11	bobby	deol	engineer	35000		rnd	8	17-oct-2017
12	aamir	khan	salesman	15000	5000	marketing	2	11-jan-2013

Consider the Department table to answer the queries

D_NAME	D_LOC	HOD_id
Sales	Kol	4
Accounts	Delhi	6
Production	Kol	1
Marketing	Kol	2
R & D	Marketing	8

1. Show the values of departmental table.
2. Select the department names and their locations.
3. Show the employees f_name ,l_name , salary and the salary after 1000rs. Bonus.
4. Show the employees annual salary with a 1000rs. Yearly bonus and the annual salary with a 100rs. Monthly bonus.
5. Show f_name as NAME and annual salary as ANNSAL from the employee table.
6. Show the l_name as LasT AND 100rs. Incremented salary as NewSal.
7. Show the emp_id, f_name, l_name, job_type of the employee getting highest salary.
8. Show the emp_id, f_name, l_name, job_type of the employee getting minimum salary.
9. Show the average salary of employees in the employee table.
10. Show f_name, l_name and job_type as employees.
11. Show employee details in the following fashion

Employee details

Arun is a manager

12. Show the monthly salary details in the following fashion

Monthly Salary Details

Arun's monthly salary is Rs. 90000

13. Show the different department names from department table
14. Show the employee names who works in 'Sales'
15. Show the employee names who gets salary of more than 50000 per month
16. Show the details of the employee whose manager id is not 1
17. Show the employee details whose salary ranges between 40000 and 70000
18. Show the details of the employees who works under the manager having id 1, 6 and 8
19. Select the f_name and salary of those employees whose last name starts with 'K'
20. Select the f_name and salary of those employees whose last name starts with 'K' and ends with 'R'
21. Show the details of those employees where 3rd letter of l_name is 'o'
22. Select the details of those employees who works as an engineer with monthly salary more than 50000
23. Select the employees whose department is 'Production' or monthly salary is more than 60000 per month.
24. Show the use of upper and lower function.
25. Show the use of concat, instr and length function
26. Show the use of the following functions on numeric values:
    a. Sqrt()
    b. Power()
    c. Ceil()
    d. Substr()
    e. Max()
    f. min()
    g. Round()
    h. avg()
    i. count()
    j. Exp()
    k. mod()
27. Solve the following queries
    l. Find the ceiling and floor value of 14.887.
    m. Find out the round-off 17.49989.
    n. Calculate 8^7.
28. Show the current date
29. Find the total experience of the employees in weeks who works in Sales department
30. Display the use of the following functions on date
    a. Months_between
    b. Add_months

c. Next_day
d. Last_day
e. Round
f. Trunc
g. To_char

31. Show the employee details with a revised salary. The salary is incremented in the following way:
    h. 10% for sales department
    i. 20% for marketing department
    j. No increment for others
32. Determine the tax for each employee in production department based on the monthly salary. The tax rate are as per the following data:

Monthly Salary Range	**Rate**
0 – 19,999	0%
20,000 – 39,999	9%
40,000 – 59,999	20%
60,000 – 79,999	30%
80,000 or more	45%

33. Find the Cartesian product between Employee and Department table.
34. Show the employee names and the respective department location.
35. Give an example of the following joins considering employee and department tables.
    k. Natural join
    l. Inner join
    m. Left outer join
    n. Right outer join
    o. Full outer join
36. Find the Cartesian product between Employee and Department table.
37. Show the employee names and the respective department location.
38. Find the employee name and date of joining who are working in Delhi
39. Create a table 'Emp_Address' for storing the permanent address of the employees and insert the following values:

Emp-id	City	District	State
1	Suri	Birbhum	WB
2	Kolkata	Kolkata	WB
3	Bhubaneswar	Khurda	Odisha
4	Durgapur	Burdwan	WB
5	Noida	GB Nagar	UP
6	Secunderabad	Hyderabad	Telangana
7	Derhadun	Derhadun	Uttarakhand
8	Asansol	Bardwan	WB
9	Siliguri	Darjeeling	WB
10	Kolkata	Kolkata	WB
11	Jalpaiguri	Jalpaiguri	WB
12	New Delhi	New Delhi	Delhi

40. Display the name of employees, department location and the city name the employee belongs to, from the Employee, Department and Emp_Address tables.
41. Find the name of each department's manager.
42. Create 'Job_Grades' table and insert the following values:

GRADE	LOWEST_SAL	HIGHEST_SAL
A	10000	24999
B	25000	49,999
C	50000	100000

43. Display the employee names with their respective job grades and salary.