

EXERCISE 4: SQL BUILT IN FUNCTIONS

Faculty Name: Dr. L.Jani Anbarasi

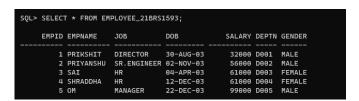
Slot: L21+L22 / L51+L52

Class Number: CH2022232501096 /CH2022232501094

Name: Pratham Jethwani Reg. No.: 21BRS1593 Date: 18/05/2023

Create an EMPLOYEE Table with the following attributes EMPID, EMPNAME, JOB, DOB, SALARY, DEPTNO, GENDER Query:-

CREATE TABLE EMPLOYEE_21BRS1593(EMPID INT,EMPNAME VARCHAR(10),JOB VARCHAR(10),DOB DATE,SALARY INT,DEPTNO VARCHAR(5),GENDER VARCHAR(6));



Write gueries for solving the following:

1. Calculate the square root of the salary of all employees.

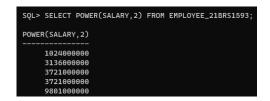
Query:

SELECT sqrt(SALARY) FROM EMPLOYEE_21BRS1593;



2. Apply any other five numeric built in function to 'salary' attribute of employee table Query:

SELECT POWER(SALARY,2) FROM EMPLOYEE_21BRS1593;



SELECT MOD(SALARY,3) FROM EMPLOYEE_21BRS1593;

```
SQL> SELECT MOD(SALARY,3) FROM EMPLOYEE_21BRS1593;

MOD(SALARY,3)
-----
2
2
1
1
0
```

SELECT SALARY, ROUND (SQRT (SALARY), 1) FROM EMPLOYEE 21BRS1593;

SELECT SALARY, TRUNC(SQRT(SALARY),2) FROM EMPLOYEE_21BRS1593;

SELECT SIGN(SALARY) FROM EMPLOYEE_21BRS1593;

```
SQL> SELECT SIGN(SALARY) FROM EMPLOYEE_21BRS1593;
SIGN(SALARY)
-----
1
1
1
1
1
```

3. Extract only the first 5 characters of the employee names. Query:

SELECT SUBSTR(EMPNAME,1,5) FROM EMPLOYEE_21BRS1593;

4. Apply any other five string built in function to 'name' attribute of employee table Query:

SELECT UPPER(EMPNAME) FROM EMPLOYEE_21BRS1593;

SELECT LOWER(EMPNAME) FROM EMPLOYEE_21BRS1593;

```
SQL> SELECT LOWER(EMPNAME) FROM EMPLOYEE_21BRS1593;

LOWER(EMPN
-------
prikshit
priyanshu
sai
shraddha
om
```

SELECT EMPNAME, LENGTH (EMPNAME) AS NAME_LENGTH FROM EMPLOYEE_21BRS1593 WHERE LENGTH (EMPNAME) > 3;

SELECT EMPNAME, INSTR(EMPNAME, 'A', 1) FROM EMPLOYEE_21BRS1593;

SELECT LPAD("EMPNAME",10,'-') FROM EMPLOYEE_21BRS1593;

5. Determine the max and min salary and rename the column as max_salary and min_salary.

Query:

SELECT MAX(SALARY) FROM EMPLOYEE_21BRS1593;

```
SQL> SELECT MAX(SALARY) FROM EMPLOYEE_21BRS1593;

MAX(SALARY)
------
99000
```

SELECT MIN(SALARY) FROM EMPLOYEE 21BRS1593;

6. Display the month name of date "14-jul-15" in full. Query:

 ${\tt SELECT\ TO_CHAR(TO_DATE('14-Jul-15',\ 'DD-Mon-RR'),\ 'Month')\ AS\ month_name\ FROM\ dual;}$

```
SQL> SELECT TO_CHAR(TO_DATE('14-Jul-15', 'DD-Mon-RR'), 'Month') AS month_name FROM dual;

MONTH_NAME

July
```

7. Display the Dob of all employees in the format "dd-mm-yy".

Query:

SELECT TO_CHAR(DOB,'DD-MM-YY') AS DOB FROM EMPLOYEE_21BRS1593;

```
SQL> SELECT TO_CHAR(DOB, 'DD-MM-YY') AS DOB FROM EMPLOYEE_21BRS1593;

DOB
------
30-08-03
02-11-03
04-04-03
12-12-03
22-12-03
```

8. Display the date two months after the Dob of employees. Query:

SELECT Add_months(DOB,2) AS NEW_DOB FROM EMPLOYEE_21BRS1593;

```
SQL> SELECT Add_months(DOB,2) AS NEW_DOB FROM EMPLOYEE_21BRS1593;

NEW_DOB
------
30-OCT-03
02-JAN-04
04-JUN-03
12-FEB-04
22-FEB-04
```

9. Display the last date of that month in "05-Oct-15".

Query:

SELECT LAST DAY('05-OCT-15') AS LAST DATE FROM DUAL;

```
SQL> SELECT LAST_DAY('05-OCT-15') AS LAST_DATE FROM DUAL;
LAST_DATE
------
31-OCT-15
```

- 10. Display the rounded date in the year format, month format, day format
- 11. Display the date 60 days before current date.

Query:

SELECT CURRENT_DATE - INTERVAL '60' DAY AS NEW_DATE FROM DUAL;

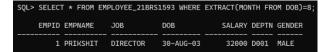
```
SQL> SELECT CURRENT_DATE - INTERVAL '60' DAY AS NEW_DATE FROM DUAL;

NEW_DATE
------
20-MAR-23
```

12. Display the names and dob of all employees who were born in August.

Query:

SELECT * FROM EMPLOYEE_21BRS1593 WHERE EXTRACT(MONTH FROM DOB)=8;



13. List out the employee names who will celebrate their birthdays during current month.

Query:

SELECT * FROM EMPLOYEE_21BRS1593 WHERE EXTRACT(MONTH FROM DOB)=EXTRACT(MONTH FROM CURRENT_DATE);

```
SQL> SELECT * FROM EMPLOYEE_21BRS1593 WHERE EXTRACT(MONTH FROM DOB)=EXTRACT(MONTH FROM CURRENT_DATE);
no rows selected
```

14. List all female employees who were born April Query:

SELECT * FROM EMPLOYEE_21BRS1593 WHERE GENDER='FEMALE' AND EXTRACT(MONTH FROM DOB)=4;



15. What is the difference between maximum and minimum salaries of employees in the organization?

Query:

SELECT MAX(SALARY)-MIN(SALARY) FROM EMPLOYEE_21BRS1593;



16. Display number of employees working in each department and their department name. Query:

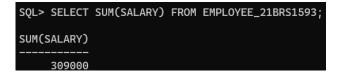
SELECT JOB, COUNT(*) AS EMPLOYEE_COUNT FROM EMPLOYEE_21BRS1593 GROUP BY JOB;



17. Display total salary spent for employees.

Query:

SELECT SUM(SALARY) FROM EMPLOYEE_21BRS1593;



18. Display total salary spent for each job category.

Query:

SELECT JOB, SUM(SALARY) AS TOTAL_SALARY FROM EMPLOYEE_21BRS1593 GROUP BY JOB;

19. Display lowest paid employee details under each manager.

Query:

SELECT E.EMPID,E.EMPNAME,E.JOB,E.DOB,E.SALARY,E.DEPTNO,E.GENDER FROM EMPLOYEE_21BRS1593 E WHERE E.SALARY=(SELECT MIN(SALARY) FROM EMPLOYEE_21BRS1593);



20. Find how many job titles are available in employee table.

Query:

SELECT COUNT(DISTINCT JOB) FROM EMPLOYEE_21BRS1593;

