WORKSHEET 2.1

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Branch: CSE   **Section/Group: 709A**
Semester: 3rd   **Date of Performance: 25/10/2021**
Subject Name:DBMS Lab   **Subject Code: 20CSP-215**

Q1.

Question 1   5 Points

Write a program in PL/SQLto update the salary of a specific employee by 10% if the salary exceeds themid range of the salary against this job and update up to mid range if thesalary is less than the mid range of the salary, and display a suitable messagefor users.

1) Aim/Overview of the practical:

To write a program in PL/SQLto update the salary of a specific employee by 10% if the salary exceeds themid range of the salary against this job and update up to mid range if thesalary is less than the mid range of the salary, and display a suitable messagefor users.

2) Software required:

   Oracle Live SQL

3) Source Code (screenshot of the query executed):

```
DECLARE
    emp_min_salary NUMBER(6,0);
    emp_max_salary NUMBER(6,0);
    emp_mid_salary NUMBER(6,2);
    tmp_salary      EMPLOYEES.SALARY%TYPE;
    tmp_emp_id      EMPLOYEES.EMPLOYEE_ID%TYPE := 167;
    tmp_emp_name    EMPLOYEES.FIRST_NAME%TYPE;
BEGIN

    SELECT min_salary,
           max_salary
    INTO emp_min_salary,
         emp_max_salary
    FROM JOBS
    WHERE JOB_ID = (SELECT JOB_ID
                    FROM EMPLOYEES
                    WHERE EMPLOYEE_ID = tmp_emp_id);


    emp_mid_salary := (emp_min_salary + emp_max_salary) / 2;

    SELECT salary,first_name
    INTO tmp_salary,tmp_emp_name
    FROM employees
    WHERE employee_id = tmp_emp_id;
```

```
IF tmp_salary < emp_mid_salary THEN
   UPDATE employees
   SET salary = emp_mid_salary
   WHERE employee_id = tmp_emp_id;
ELSE
   UPDATE employees
   SET salary = salary + salary * 10/100
   WHERE employee_id = tmp_emp_id;
END IF;

IF tmp_salary > emp_mid_salary THEN
   DBMS_OUTPUT.PUT_LINE('The employee '||tmp_emp_name||' ID ' || TO_CHAR(tmp_emp_id) ||
                        ' works in salary ' || TO_CHAR(tmp_salary) ||
                        ' which is higher than mid-range of salary ' || TO_CHAR(emp_mid_salary));
ELSIF tmp_salary < emp_mid_salary THEN
   DBMS_OUTPUT.PUT_LINE('The employee '||tmp_emp_name||' ID ' || TO_CHAR(tmp_emp_id) ||
                        ' works in salary ' || TO_CHAR(tmp_salary) ||
                        ' which is lower than mid-range of salary ' || TO_CHAR(emp_mid_salary));

ELSE
   DBMS_OUTPUT.PUT_LINE('The employee '||tmp_emp_name||' ID ' || TO_CHAR(tmp_emp_id) ||
                        ' works in salary ' || TO_CHAR(tmp_salary) ||
                        ' which is equal to the mid-range of salary ' || TO_CHAR(emp_mid_salary));
   END IF;
END;
/
```

4**. Final Result/Output (after removing the errors): (Screenshot of output without any error)**

```
Statement processed.
The employee Rahul  ID 201 works in salary 5000 which is lower than mid-range of salary
```

Learning outcomes (What I have learnt):

1.

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Q2.

Question 2

5 Points

Write a PL/SQL program to identify whether a character entered by user is letter or digit.

Use the editor to format your answer

1) Aim/Overview of the practical:

To write a PL/SQL program to identify whether a character entered by user is letter or digit.

2) Software required:

Oracle Live SQL

3) Source Code (screenshot of the query executed):

```sql
DECLARE
    get_ctr CHAR(100) := 'hello ';
BEGIN
    IF ( get_ctr >= 'A'
        AND get_ctr <= 'Z' )
        OR ( get_ctr >= 'a'
            AND get_ctr <= 'z' ) THEN
    dbms_output.Put_line ('The given character is a letter');
    ELSE
    dbms_output.Put_line ('The given character is not a letter');

        IF get_ctr BETWEEN '0' AND '9' THEN
        dbms_output.Put_line ('The given character is a number');
        ELSE
        dbms_output.Put_line ('The given character is not a number');
        END IF;
    END IF;
END;
/
```

4. Final Result/Output (after removing the errors): (Screenshot of output without any error)

```
Statement processed.
The given character is a letter
```

Learning outcomes (What I have learnt):

1.

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Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			