

NAME

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SUBJECT

**DATABASE MANAGEMENT SYSTEM**

EXERCISE

**FIVE**

## 1. PL/SQL program to find small and large value

```
DECLARE
    num1 INTEGER := &Enter_first_integer;
    num2 INTEGER := &Enter_second_integer;
    small INTEGER;
    big INTEGER;
BEGIN
    IF num1 < num2 THEN
        small := num1;
        big := num2;
    ELSE
        small := num2;
        big := num1;
    END IF;
    DBMS_OUTPUT.PUT_LINE('The smallest value is ' ||
small);
    DBMS_OUTPUT.PUT_LINE('The largest value is ' ||
big);
END;
/
```

## 2. PL/SQL program to count employees and check vacancies

```
DECLARE
    dept_count INTEGER;
    emp_count INTEGER;
BEGIN
    FOR dept IN (SELECT deptid FROM department) LOOP
        SELECT COUNT(*) INTO emp_count FROM employee
        WHERE deptid = dept.deptid;
        IF emp_count < 45 THEN
            DBMS_OUTPUT.PUT_LINE('Department ' ||
            dept.deptid || ' has ' || emp_count || ' employees
            and has vacancies.');
```

```
        ELSE
            DBMS_OUTPUT.PUT_LINE('Department ' ||
            dept.deptid || ' has ' || emp_count || ' employees
            and is full.');
```

```
        END IF;
    END LOOP;
END;
/
```

### 3. PL/SQL procedure to calculate incentive amount

```
CREATE OR REPLACE PROCEDURE
calculate_incentive(emp_id IN INTEGER) AS
    salary NUMBER;
    incentive NUMBER;
BEGIN
    SELECT salary INTO salary FROM employee WHERE empid
= emp_id;
    incentive := salary * 0.1;
    DBMS_OUTPUT.PUT_LINE('Employee ' || emp_id || ' has
a salary of ' || salary || ' and is eligible for an
incentive of ' || incentive);
END;
/
```

## 4. Stored procedure to seek and delete/update stock

```
CREATE OR REPLACE PROCEDURE update_stock(item_code IN
VARCHAR2) AS
    last_purchased DATE;
    current_stock INTEGER;
BEGIN
    SELECT last_purchase, current_stock INTO
last_purchased, current_stock FROM stock WHERE
item_code = item_code;
    IF last_purchased < ADD_MONTHS(SYSDATE, -12) THEN
        DELETE FROM stock WHERE item_code = item_code;
    ELSE
        UPDATE stock SET current_stock = current_stock +
1 WHERE item_code = item_code;
    END IF;
END;
/
```

## 5. Function to search for address using phone number

```
CREATE OR REPLACE FUNCTION get_address(phone_num IN
VARCHAR2) RETURN VARCHAR2 AS
    address VARCHAR2(100);
BEGIN
    SELECT address INTO address FROM phone_user WHERE
phone_number = phone_num;
    RETURN address;
END;
/
```