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Course: Distributed Database (BSCS 606)

Lab # 2

1) Find the sum of two numbers

```
DECLARE
  a NUMBER := 10;
  b NUMBER := 20;
  sum NUMBER;
BEGIN
  sum := a + b;
  DBMS_OUTPUT.PUT_LINE('Sum of ' || a || ' and ' || b || ' is: ' || sum);
END;
```

2) Update total salary for empno 100

(Assume total = bp + da + hra)

```
BEGIN
  UPDATE employee
  SET total = bp + da + hra
  WHERE eno = 100;
  DBMS_OUTPUT.PUT_LINE('Salary updated successfully for empno 100');
END;
```

3) Find the larger of two numbers

```
DECLARE
  a NUMBER := 45;
  b NUMBER := 78;
  larger NUMBER;
BEGIN
  IF a > b THEN
    larger := a;
  ELSE
    larger := b;
  END IF;
  DBMS_OUTPUT.PUT_LINE('Larger number is: ' || larger);
END;
```

4) Find the greatest of three numbers

```
DECLARE
  a NUMBER := 12;
  b NUMBER := 45;
  c NUMBER := 30;
  greatest NUMBER;
```

```

BEGIN
    IF a > b AND a > c THEN
        greatest := a;
    ELSIF b > c THEN
        greatest := b;
    ELSE
        greatest := c;
    END IF;
    DBMS_OUTPUT.PUT_LINE('Greatest number is: ' || greatest);
END;

```

5) Calculate fine for rno 100

(Formula: Rs 1/day if days<7, Rs 2/day if 7<=days<=14, Rs 3/day if days>14)

```

DECLARE
    v_rno NUMBER := 100;
    v_doi DATE;
    v_dor DATE;
    v_days NUMBER;
    v_fine NUMBER;
BEGIN
    SELECT doi, dor INTO v_doi, v_dor
    FROM library
    WHERE rno = v_rno;

    v_days := v_dor - v_doi;

    IF v_days < 7 THEN
        v_fine := v_days * 1;
    ELSIF v_days <= 14 THEN
        v_fine := v_days * 2;
    ELSE
        v_fine := v_days * 3;
    END IF;

    UPDATE library
    SET fine = v_fine
    WHERE rno = v_rno;

    DBMS_OUTPUT.PUT_LINE('Fine for roll no ' || v_rno || ' is Rs: ' || v_fine);
END;

```

6) Multiplication table for 3 to n

```

DECLARE
    n NUMBER := 5; -- You can change this value
    i NUMBER;
    j NUMBER;
BEGIN
    FOR i IN 3..n LOOP
        DBMS_OUTPUT.PUT_LINE('Multiplication Table for ' || i);
        FOR j IN 1..10 LOOP
            DBMS_OUTPUT.PUT_LINE(i || ' x ' || j || ' = ' || (i*j));
        END LOOP;
    END LOOP;
END;

```