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**Course: Distributed Database (BSCS 606)**

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## 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;
```

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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;
```

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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;
```

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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;

```

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## 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;

```

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## 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;

```