Name: Vinayak Kumar Singh   **Subject:** Database System Lab

Register No: 23MCA1030   **Date**:14-09-2023

Exercise 5: Programs using IF - ELSE and Loop Structures

IF ELSE:

```
SQL> set serveroutput on
SQL> DECLARE
  2     x NUMBER := 10;
  3   BEGIN
  4     IF x > 5 THEN
  5        DBMS_OUTPUT.PUT_LINE('x is greater than 5');
  6     ELSE
  7        DBMS_OUTPUT.PUT_LINE('x is not greater than 5');
  8     END IF;
  9   END;
 10   /
x is greater than 5

PL/SQL procedure successfully completed.
```

For Loop:

```
SQL> DECLARE
  2     i NUMBER;
  3   BEGIN
  4     FOR i IN 1..5 LOOP
  5        DBMS_OUTPUT.PUT_LINE('Iteration ' || i);
  6     END LOOP;
  7   END;
  8   /
Iteration 1
Iteration 2
Iteration 3
Iteration 4
Iteration 5
```

While Loop:

```
SQL> DECLARE
  2      counter NUMBER := 1;
  3   BEGIN
  4      WHILE counter <= 5 LOOP
  5         DBMS_OUTPUT.PUT_LINE('Counter: ' || counter);
  6         counter := counter + 1;
  7      END LOOP;
  8   END;
  9  /
Counter: 1
Counter: 2
Counter: 3
Counter: 4
Counter: 5

PL/SQL procedure successfully completed.
```

Nested IF-ELSE Statement:

```
SQL> DECLARE
  2      num NUMBER := 15;
  3   BEGIN
  4      IF num < 10 THEN
  5         DBMS_OUTPUT.PUT_LINE('Number is less than 10');
  6      ELSE
  7         IF num < 20 THEN
  8            DBMS_OUTPUT.PUT_LINE('Number is between 10 and 20');
  9         ELSE
 10            DBMS_OUTPUT.PUT_LINE('Number is greater than or equal to 20');
 11         END IF;
 12      END IF;
 13   END;
 14  /
Number is between 10 and 20

PL/SQL procedure successfully completed.
```

END