EXP 9

<u>PL/SQL CONDITIONAL & ITERATIVE STATEMENTS</u>

<u>AIM</u>: To execute PL/SQL conditional & iterative statements

1) Program to Add two numbers

```
C:\Users\Admin\Desktop\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL*Plus: Release 11.2.0.4.0 Production on Wed Mar 16 12:27:10 2022

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Enter user-name:  RA1911028010005/RA1911028010005@h2-drkgeetha.co86hfjmfjkx.us-west-2.rds.amazonaws.com:1521/h2

Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

SQL> spool ex9.lst
SQL> DECLARE
  2     a integer := 10;
  3     b integer := 20;
  4     c integer;
  5     f real;
  6  BEGIN
  7     c := a + b;
  8     dbms_output.put_line('Value of c: ' || c);
  9     f := 70.0/3.0;
 10     dbms_output.put_line('Value of f: ' || f);
 11  END;
 12  /

PL/SQL procedure successfully completed.
```

2)Program to find the square of a given number.

```
SQL> DECLARE
  2      a number;
  3  PROCEDURE squareNum(x IN OUT number) IS
  4  BEGIN
  5    x := x * x;
  6  END;
  7  BEGIN
  8     a:= 23;
  9     squareNum(a);
 10     dbms_output.put_line(' Square of (23): ' || a);
 11  END;
 12  /

PL/SQL procedure successfully completed.
```

3)Program based on loop statement

```
SQL*Plus: Release 11.2.0.4.0 Production on Wed Mar 16 12:48:34 2022

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Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

SQL> DECLARE
  2      i number(1);
  3      j number(1);
  4  BEGIN
  5      << outer_loop >>
  6      FOR i IN 1..3 LOOP
  7          << inner_loop >>
  8          FOR j IN 1..3 LOOP
  9              dbms_output.put_line('i is: '|| i || ' and j is: ' || j);
 10          END loop inner_loop;
 11      END loop outer_loop;
 12  END;
 13  /

PL/SQL procedure successfully completed.
```

4)Program based on If and Else statements by passing parameters

```
QL> DECLARE
  2      a number;
  3      b number;
  4      c number;
  5  PROCEDURE findMin(x IN number, y IN number, z OUT number) IS
  6  BEGIN
  7      IF x < y THEN
  8          z:= x;
  9      ELSE
 10          z:= y;
 11      END IF;
 12  END;
 13  BEGIN
 14      a:= 23;
 15      b:= 45;
 16      findMin(a, b, c);
 17      dbms_output.put_line(' Minimum of (23, 45) : ' || c);
 18  END;
 19  /

L/SQL procedure successfully completed.
```

5)PL/SQL variables using the SELECT INTO clause

```
SQL*Plus: Release 11.2.0.4.0 Production on Wed Mar 16 13:13:47 2022

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Enter user-name: RA1911028010005/RA1911028010005@h2-drkgeetha.coB6hfjmfjkx.us-west-2.rds.amazonaws.com:1521/h2

Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

SQL> spool ex9.lst
SQL> CREATE TABLE CUSTOMERS(
  2     ID   INT NOT NULL,
  3     NAME VARCHAR (20) NOT NULL,
  4     AGE INT NOT NULL,
  5     ADDRESS CHAR (25),
  6     SALARY   DECIMAL (18, 2),
  7     PRIMARY KEY (ID)
  8  );

Table created.

SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)
  2  VALUES (1, 'Ramesh', 32, 'Ahmedabad', 2000.00 );

1 row created.
```

```
SQL>
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)
  2  VALUES (2, 'Khilan', 25, 'Delhi', 1500.00 );

1 row created.

SQL>
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)
  2  VALUES (3, 'kaushik', 23, 'Kota', 2000.00 );

1 row created.

SQL>
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)
  2  VALUES (4, 'Chaitali', 25, 'Mumbai', 6500.00 );

1 row created.

SQL>
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)
  2  VALUES (5, 'Hardik', 27, 'Bhopal', 8500.00 );

1 row created.

SQL>
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)
  2  VALUES (6, 'Komal', 22, 'MP', 4500.00 );

1 row created.
```

```
SQL> DECLARE
  2     c_id customers.id%type := 1;
  3     c_name   customers.name%type;
  4     c_addr customers.address%type;
  5     c_sal   customers.salary%type;
  6  BEGIN
  7     SELECT name, address, salary INTO c_name, c_addr, c_sal
  8     FROM customers
  9     WHERE id = c_id;
 10     dbms_output.put_line
 11     ('Customer ' ||c_name || ' from ' || c_addr || ' earns ' || c_sal);
 12  END;
 13  /
PL/SQL procedure successfully completed.

SQL>
```

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