## **Practical no. 2**

**Aim:** Writing a PL/SQL block with basic programming constructs by including the following.

* 1. Sequential statements
  2. Unconstrained loop

1. **Sequential Statement**
2. **Write a pl/sql block to perform arithmetic operation entered by the user.**

**Program:**

set serveroutput on

accept operation char prompt "Enter the operation(+, -, \*, /): "

accept n1 number prompt "Enter first number: "

accept n2 number prompt "Enter second number: "

DECLARE

    N1 NUMBER;

    N2 NUMBER;

    OPERATION VARCHAR(1);

BEGIN

    N1 := &N1;

    N2 := &N2;

    OPERATION := '&OPERATION';

    IF OPERATION = '+' THEN

        DBMS\_OUTPUT.PUT\_LINE(chr(10)||'The addition of '||N1||' and '||N2||' is '||(N1+N2));

    ELSIF OPERATION = '-' THEN

        DBMS\_OUTPUT.PUT\_LINE('The addition of '||N1||' and '||N2||' is '||(N1-N2));

    ELSIF OPERATION = '\*' THEN

        DBMS\_OUTPUT.PUT\_LINE('The addition of '||N1||' and '||N2||' is '||(N1\*N2));

    elsif OPERATION = '/' THEN

        DBMS\_OUTPUT.PUT\_LINE('The addition of '||N1||' and '||N2||' is '||(N1/N2));

    END if;

END;

/

**Output:**

Enter the operation(+, -, \*, /): -

Enter first number: 10

Enter second number: 8

old 6: N1 := &N1;

new 6: N1 := 10;

old 7: N2 := &N2;

new 7: N2 := 8;

old 8: OPERATION := '&OPERATION';

new 8: OPERATION := '-';

The addition of 10 and 8 is 2

Enter the operation(+, -, \*, /): /

Enter first number: 100

Enter second number: 2

old 6: N1 := &N1;

new 6: N1 := 100;

old 7: N2 := &N2;

new 7: N2 := 2;

old 8: OPERATION := '&OPERATION';

new 8: OPERATION := '/';

The addition of 100 and 2 is 50

1. **Unconstrained loop**
2. **Write a pl/sql block to generate table of 20**

**Program:**

set serveroutput on;

accept num number prompt "Enter the number: ";

DECLARE

    num number;

    i number;

BEGIN

    num := &num;

    i := 1;

    DBMS\_OUTPUT.PUT\_LINE(chr(10));

    loop

        DBMS\_OUTPUT.PUT\_LINE(num||' \* '||i||' = '||num\*i);

        i:=i+1;

        exit when i > 10;

    end loop;

end;

/

**Output:**

Enter the number: 20

old 5: num := &num;

new 5: num := 20;

20 \* 1 = 20

20 \* 2 = 40

20 \* 3 = 60

20 \* 4 = 80

20 \* 5 = 100

20 \* 6 = 120

20 \* 7 = 140

20 \* 8 = 160

20 \* 9 = 180

20 \* 10 = 200

1. **To show the number between 1000-1010**

**Program:**

set serveroutput on

accept num1 number prompt "Enter the first number: "

accept num2 number prompt "Enter the second number: "

DECLARE

    NUM1 NUMBER;

    NUM2 NUMBER;

BEGIN

    num1 := &num1;

    num2 := &num2;

    DBMS\_OUTPUT.PUT\_LINE(CHR(10));

    LOOP

        DBMS\_OUTPUT.PUT\_LINE(NUM1);

        NUM1 := NUM1+1;

        EXIT WHEN NUM1>NUM2;

    END LOOP;

END;

/

**Output:**

Enter the first number: 1000

Enter the second number: 1010

old 6: num1 := &num1;

new 6: num1 := 1000;

old 7: num2 := &num2;

new 7: num2 := 1010;

1000

1001

1002

1003

1004

1005

1006

1007

1008

1009

1010

## **Practical no. 4**

**Aim:** Writing a PL/SQL block with basic programming constructs by including the following.

1. IF .. THEN .. ELSE
2. IF .. ELSIF .. ELSE .. END IF
3. CASE
4. **IF .. THEN .. ELSE**
5. **Write a pl/sql block to check whether number is less than 50**

**Program:**

set serveroutput on

DECLARE

    NUM NUMBER := 9;

BEGIN

    IF (NUM < 50) THEN

        DBMS\_OUtPUT.PUT\_LINE(chr(10)||NUM||' is less than 50.');

    END IF;

    DBMS\_OUtPUT.PUT\_LINE(NUM||' is entered.');

END;

/

**Output:**

9 is less than 50.

9 is entered.

1. **Write a pl/sql block to check number entered by user is less than 50**

**Program:**

set serveroutput on

accept num number prompt "Enter the number: "

DECLARE

    NUM NUMBER := &num;

BEGIN

    IF (NUM < 50) THEN

        DBMS\_OUtPUT.PUT\_LINE(chr(10)||NUM||' is less than 50.');

    END IF;

    DBMS\_OUtPUT.PUT\_LINE(NUM||' is entered.');

END;

/

**Output:**

Enter the number: 49

old 2: NUM NUMBER := &num;

new 2: NUM NUMBER := 49;

49 is less than 50.

49 is entered.

1. **IF .. ELSIF .. ELSE .. END IF**
2. **Write a pl/sql program to update salary of employee by 2000 if salary is less than or equal to 20000**

**Program:**

set serveroutput on

DECLARE

    NUM NUMBER := 9;

BEGIN

    IF (NUM < 50) THEN

        DBMS\_OUtPUT.PUT\_LINE(chr(10)||NUM||' is less than 50.');

    END IF;

    DBMS\_OUtPUT.PUT\_LINE(NUM||' is entered.');

END;

/

**Output:**

9 is less than 50.

9 is entered.