EXPERIMENT-10

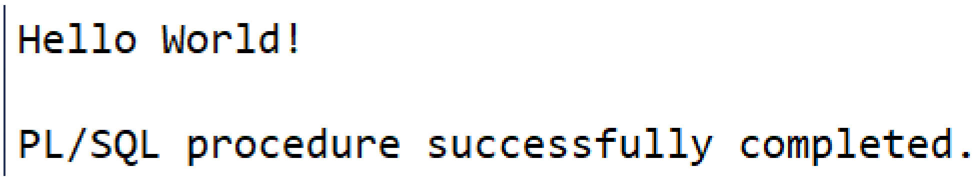
Aim: To Practice PL/SQL Command.

Software Used: MySQL

Code: BASICS: Syntax, Comments, Variable Attributes, Conditionals: IF-THEN-ELSE, CASE, LOOPS-For, While.

Syntax:

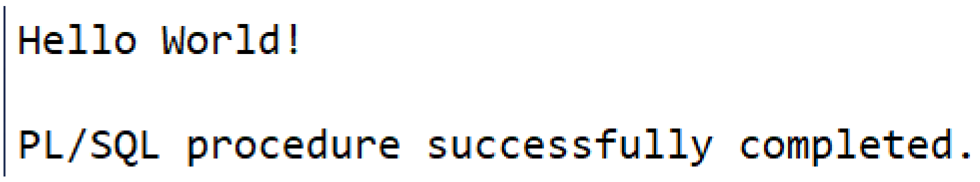
```
DECLARE
 message varchar2(20):= 'Hello, World!’;
BEGIN
 dbms_output.put_line(message);
END;
```



```
Hello World!

PL/SQL procedure successfully completed.
```

Comments:

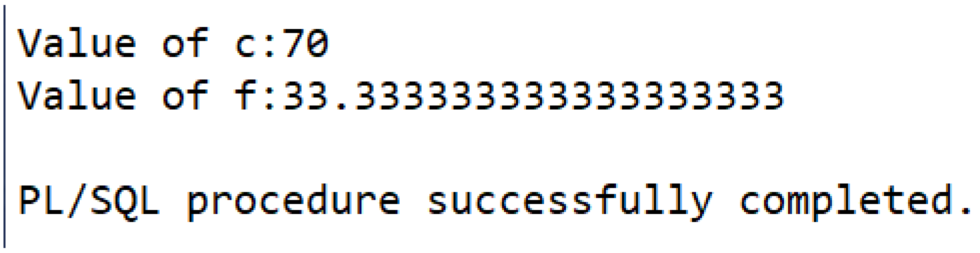
```
DECLARE
 -- variable declaration
 message varchar2(20):= 'Hello, World!';
BEGIN
 /*
 * PL/SQL executable statement(s)
 */
 dbms_output.put_line(message);
END;
/
```



```
Hello World!

PL/SQL procedure successfully completed.
```

Example:

```
DECLARE
 a integer := 30;
 b integer := 40;
 c integer;
 f real;
BEGIN
 c := a + b;
 dbms_output.put_line('Value of c: ' || c);
 f := 100.0/3.0;
 dbms_output.put_line('Value of f: ' || f);
END;
```

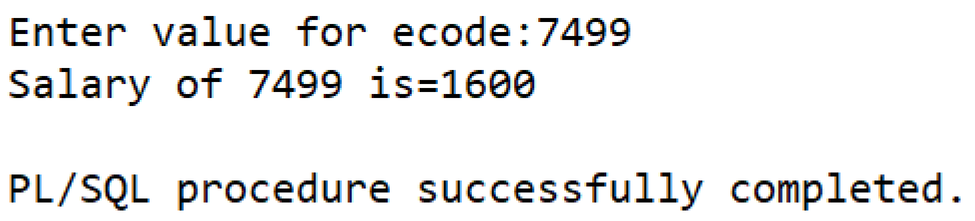


```
Value of c:70
Value of f:33.33333333333333333333

PL/SQL procedure successfully completed.
```

Variable Attributes:

% TYPE

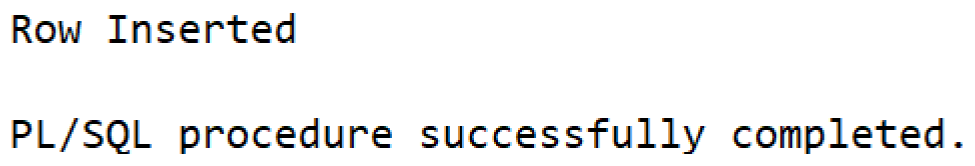
```
DECLARE
SALARY EMP.SAL % TYPE;
ECODE EMP.empno % TYPE;
BEGIN
Ecode :=&Ecode;
Select SAL into SALARY from EMP where EMPNO = ECODE;
dbms_output.put_line('Salary of ' || ECODE || 'is = || salary');
END;
```



```
Enter value for ecode:7499
Salary of 7499 is=1600

PL/SQL procedure successfully completed.
```

%ROWTYPE

```
DECLARE
EMPLOYEE EMP. % ROW TYPE;
BEGIN
EMPLOYEE.EMPNO := 2092;
5 EMPLOYEE.ENAME := 'Sanju';
Insert into EMP where (EMPNO, ENAME) Values (employee.empno, employee.ename);
dbms_output.put_line('Row Inserted');
END;
```

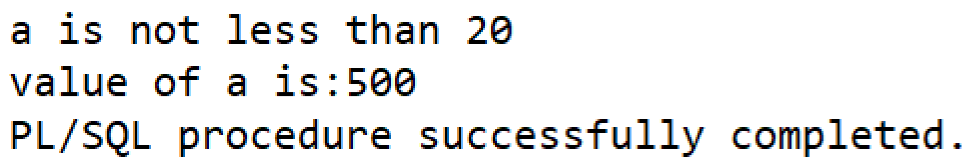


```
Row Inserted

PL/SQL procedure successfully completed.
```

Conditionals

1) IF -THEN-ELSE

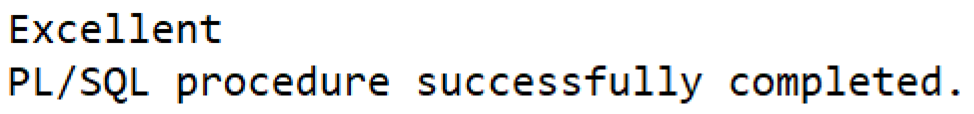
```
DECLARE
 a number(3) := 500;
BEGIN
 -- check the boolean condition using if statement
 IF( a < 20 ) THEN
 -- if condition is true then print the following
 dbms_output.put_line('a is less than 20 ' );
 ELSE
 dbms_output.put_line('a is not less than 20 ' );
 END IF;
 dbms_output.put_line('value of a is : ' || a);
END;
```



```
a is not less than 20
value of a is:500
PL/SQL procedure successfully completed.
```

2) CASE

```
DECLARE
 grade char(1) := 'A';
BEGIN
 CASE grade
 when 'A' then dbms_output.put_line('Excellent');
 when 'B' then dbms_output.put_line('Very good');
 when 'C' then dbms_output.put_line('Good');
 when 'D' then dbms_output.put_line('Average');
 when 'F' then dbms_output.put_line('Passed with Grace');
 else dbms_output.put_line('Failed');
 END CASE;
END;
```

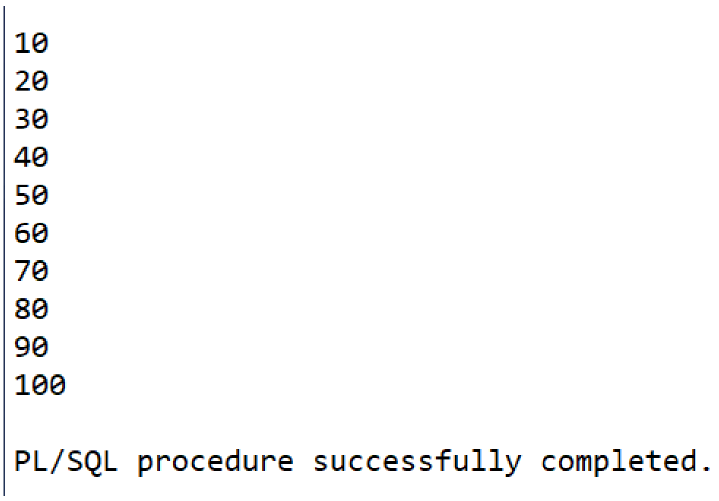


```
Excellent
PL/SQL procedure successfully completed.
```

Loop:

1) FOR

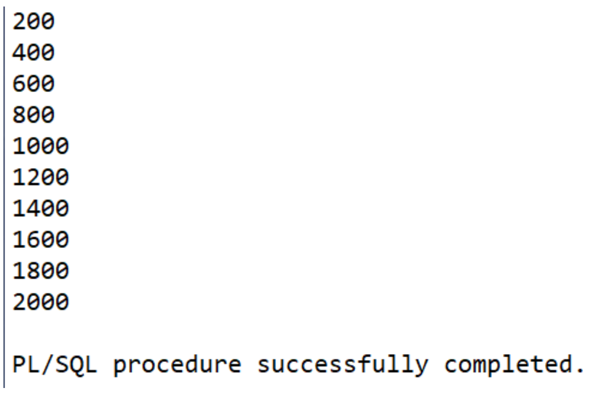
```
DECLARE
VAR1 NUMBER;
BEGIN
VAR1:=10;
FOR VAR2 IN 1..10
LOOP
DBMS_OUTPUT.PUT_LINE (VAR1*VAR2);
END LOOP;
END;
```



```
10
20
30
40
50
60
70
80
90
100

PL/SQL procedure successfully completed.
```

2) <u>WHILE</u>

```
DECLARE

VAR1 NUMBER;

VAR2 NUMBER;

BEGIN

VAR1:=200;

VAR2:=1;

WHILE (VAR2<=10)

LOOP

DBMS_OUTPUT.PUT_LINE (VAR1*VAR2);

VAR2:=VAR2+1;

END LOOP;

END;
```



```
200
400
600
800
1000
1200
1400
1600
1800
2000

PL/SQL procedure successfully completed.
```

Conclusion: Various forms of PL/SQL queries were demonstrated.