

# Experiment-10

## Aim:

To Perform PL/SQL Commands.

## Types of PL/SQL:

Syntax, Comments, Variable Attributes, Conditionals: IF-THEN-ELSE, Case, Loops – For, While

## Input:

### Syntax

```
DECLARE
```

```
    message varchar2(20):= 'Hello World From ';
```

```
BEGIN
```

```
    dbms_output.put_line(message);
```

```
END;
```

```
/
```

## O/P:

```
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; /
```

## O/P:

```
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;
```

**O/P:**

```

Value of c: 70
Value of f: 33.333333333333333333

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;

**O/P:**

```

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;
```

**O/P:**

```
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;
```

**O/P:**

```
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;
```

**O/P:**

Excellent  
PL/SQL procedure successfully completed.

### Loop

#### 1) FOR

```
DECLARE
```

```
VAR1 NUMBER;
```

BEGIN	10
	20
VAR1:=10;	30
FOR VAR2 IN 1..10	40
LOOP	50
	60
DBMS_OUTPUT.PUT_LINE (VAR1*VAR2);	70
	80
END LOOP;	90
END;	100

#### 2) WHILE

DECLARE	200
VAR1 NUMBER;	400
VAR2 NUMBER;	600
BEGIN	800
VAR1:=200;	1000
VAR2:=1;	1200
WHILE (VAR2<=10)	1400
LOOP	1600
DBMS_OUTPUT.PUT_LINE (VAR1*VAR2);	1800
VAR2:=VAR2+1;	2000
END LOOP;	
END;	

## Experiment-9

### Aim:

To Practice View Command.

### Input: (Create, Update and Delete)

- CREATE TABLE Employee1660(  
EmployeeID int NOT NULL PRIMARY KEY,  
FirstName varchar(255) NOT NULL,  
LastName varchar(255),  
Salary int  
);

Employee1660

EmployeeID	FirstName	LastName	Salary
1	Shambhavi	Mishra	10000000
2	Jigyasa	Jha	9900000
3	Khushi	Sharma	9700000
4	Saumya	Singh	9500000
5	Pratyaksha	Sharma	9300000

- CREATE TABLE Dept1660(  
Dept\_ID int NOT NULL PRIMARY KEY,  
Dept\_Name varchar(255) NOT NULL,  
EID int  
);

Dept1660

Dept_ID	Dept_Name	EmployeeID
32	Finance	1
62	Marketing	5
51	HR	3
27	Software	4
19	Management	2

### ❖ Creating a View

#### ▪ From a Single Table

```
CREATE VIEW details AS  
SELECT EmployeeID, FirstName  
FROM Employee1660  
WHERE Salary >= '9100000';
```

```
SELECT *  
FROM details;
```

EmployeeID	FirstName
1	Shambhavi
2	Jigyasa
3	Khushi
4	Saumya
5	Pratyaksha

### ▪ From Multiple Tables

```
CREATE VIEW details2 AS
SELECT Employee1660.FirstName, Employee1660.Salary,
Dept1660.Dept_Name FROM Employee1660, Dept1660
WHERE Employee1660.EmployeeID = Dept1660.EmployeeID;
```

```
SELECT *
FROM details2;
```

FirstName	Salary	Dept_Name
Shambhavi	10000000	Finance
Pratyaksha	9300000	Marketing
Khushi	9700000	HR
Saumya	9500000	Software
Jigyasa	9900000	Management

### ❖ Updating a View

```
CREATE OR REPLACE VIEW details AS
SELECT Employee1660.FirstName, Employee1660.Salary, Dept1660.Dept_Name,
Dept1660.Dept_ID FROM Employee1660, Dept1660
WHERE Employee1660.EmployeeID = Dept1660.EmployeeID;
```

FirstName	Salary	Dept_Name	Dept_ID
Shambhavi	10000000	Finance	32
Pratyaksha	9300000	Marketing	62
Khushi	9700000	HR	51
Saumya	9500000	Software	27
Jigyasa	9900000	Management	19

### ❖ Deleting a View

```
DROP VIEW details;
```

#### Output

SQL query successfully executed. However, the result set is empty.