PL/SQL Data Type

A. Numeric Data Types:-

(a) NUMBER (Precision

(b) DEC (Precision, Scale)

(c) FLOAT

(d) INT

(e) INTEGER

(f) SMALL INT

(g) REAL

B. Character Data Type:-

a. CHAR

b. VARCHAR/VARCHAR 2

c. NCHAR

d. NVAR

e. NVARCHAR 2

f. RAW

g. LONG : 2GB

h. LONG RAW: 4GB

i. ROWID

j. VROWID etc.

c. BOOLEAN Data Type :-

TRUE, FALSE, OR NULL

D. DATE Data Type

Default Format `dd - mon - yyyy`
   eg: `29 - Oct - 2021`

E. LOB (Large Object Data Type)

F. BFILE : upto 4GB.
   ↳ Binary file.

G. BLOB : 128 TB

H. CLOB :- 128 TB

Variable:- Variables in PL/SQL begins with a character with maximum 80 characters. They are used to hold values. In a PL/SQL block we can assign some value of ~~vaoi~~ to a variable using assignment operator (:=) and we can also fetch data values from tables into the variables.

   Variables are declared ~~as~~ as,
                Variable datatype ;
   for ge: balance FLOAT ;
              eName VARCHAR(80) ;
              balance := 1000.70 ;

```
SELECT Name INTO sName
FROM Student WHERE Roll No = 10;
```

Constant : Declaring a constant is similar to declaring a variable except that the keyword CONSTANT must b added to the variable name and a value is assigned immediately. There after no further assignment to the variable is possible.

Syntax:-

```
Constant_Name  CONSTANT datatype := Value
```

for eg:-
```
pi FLOAT := 8.1416;
```

Condition Control Statement:-

```
( IF- THEN -ELSEIF ....... END IF)
```
Syntax:-
```
If Condition THEN.
    action;
ELSEIF condition THEN
    action;
    ---  ---
    ...  ---
END IF;
```

for example :-

Write a PL/SQL block to take employee number as input, fetch the salary of that employee and increase the salary by 2000 if salary is less than equal 10,000 otherwise increase the salary by 5000. Assume that we have a table EMP with few records as :-

Emp
(EmpNo, EName, Post, Salary .....)

```
DECLARE
    eno VARCHAR (80);
    Sal FLOAT;
    new_Sal FLOAT;

BEGIN
    eno := &eno;   OR eno := :eno;   // To take
                                     input from the user
    SELECT Salary INTO Sal FROM Emp
    WHERE EmpNo = eno;
    IF Sal <= 10,000 THEN
        new_Sal := Sal + 2000;
    ELSE
        new_Sal := Sal + 5000;
    END IF;
    UPDATE Emp SET Salary = new_Sal
    WHERE EmpNo = eno;
END;
```