EXPERIMENT – 10

AIM :- Create a program in Pl-Sql.

THEORY:- PL/SQL is a combination of SQL along with the procedural features of programming languages. It was developed by Oracle Corporation in the early 90's to enhance the capabilities of SQL. PL/SQL is one of three key programming languages embedded in the Oracle Database, along with SQL itself and Java. This tutorial will give you great understanding on PL/SQL to proceed with Oracle database and other advanced RDBMS concepts.

**Overview of Pl- Sql:-**

PL/SQL is a block structured language that enables developers to combine the power of SQL with procedural statements.All the statements of a block are passed to oracle engine all at once which increases processing speed and decreases the traffic.

**Disadvantages of SQL:**

* SQL doesn’t provide the programmers with a technique of condition checking, looping and branching.
* SQL statements are passed to Oracle engine one at a time which increases traffic and decreases speed.
* SQL has no facility of error checking during manipulation of data.

**Features of PL/SQL:**

1. PL/SQL is basically a procedural language, which provides the functionality of decision making, iteration and many more features of procedural programming languages.
2. PL/SQL can execute a number of queries in one block using single command.
3. One can create a PL/SQL unit such as procedures, functions, packages, triggers, and types, which are stored in the database for reuse by applications.
4. PL/SQL provides a feature to handle the exception which occurs in PL/SQL block known as exception handling block.
5. Applications written in PL/SQL are portable to computer hardware or operating system where Oracle is operational.
6. PL/SQL Offers extensive error checking.

Advantages of Pl-Sql :-

 PL/SQL offers the following advantages over any other procedural language:

* support for SQL,
* closer integration with Oracle leading to better performance, and
* support for object-oriented programming.

**Program Code:-**

DECLARE

z\_empid employees.employee\_id%TYPE;

z\_empname employees.first\_name%TYPE;

z\_salary employees.salary%TYPE;

CURSOR employee\_cursor IS -- declaring a cursor

SELECT employee\_id,

first\_name,

salary

FROM employees;

BEGIN

OPEN employee\_cursor; -- opening the cursor

LOOP

FETCH employee\_cursor -- fetching records from the cursor

INTO z\_empid,

z\_empname,

z\_salary;

EXIT

WHEN employee\_cursor%NOTFOUND;

IF (z\_salary > 8000) THEN

dbms\_output.Put\_line(z\_empid

|| ' '

|| z\_empname

|| ' '

|| z\_salary);

ELSE

dbms\_output.Put\_line(z\_empname

|| ' salary is less then 8000');

END IF;

END LOOP;

CLOSE employee\_cursor; --closing the cursor

END;

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OUTPUT :

SQL> /

100 Steven 24000

101 Neena 17000

102 Lex 17000

103 Alexander 9000

Bruce salary is less then 8000

David salary is less then 8000

Valli salary is less then 8000

Diana salary is less then 8000

108 Nancy 12008

109 Daniel 9000

110 John 8200

Ismael salary is less then 8000

Jose Manuel salary is less then 8000

Luis salary is less then 8000

114 Den 11000

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