

PLSQL Training

Basics of PL/SQL

- PLSQL Architecture and Advantages of PLSQL
- Data Types(Pre-Defined and User Defined)
- Variables and Constants
- Data Type Conversion

PLSQL Architecture and Advantages of PLSQL

- SQL (Structured Query Language) is a powerful tool for any DB.
- PL SQL – Procedural Language for SQL.
- Portable, high-performance transaction-processing language.
- Performance, Productivity, Portability, Security.
- OOPS support.
- Access to inbuilt packages like DBMS_ , UTL_
- Develop Web Pages (mod_plsql).

Data Types(Pre-Defined and User Defined)

- Scalar – Simple like NUMBER, CHAR, VARCHAR, DATE, Boolean
- Composite – RECORD, VARRAY, PLSQL TABLES
- BLOB and CLOB – Stores Files , Images
- Reference – REF CURSORS

- Variables and Constants

- a NUMBER;
- b NUMBER := 10;
- c VARCHAR2(10) DEFAULT 'Hello';

- Data Conversion

- TO_CHAR
- TO_DATE

Simple blocks and Control structures

- Simple Blocks

Begin

....

End;

- Control Block

Begin

....

EXCEPTION

 WHEN NO_DATA_FOUND THEN

 WHEN OTHERS THEN

End;

```
create or replace procedure hello_world as  
begin  
    dbms_output.put_line('Hello');  
end hello_world;
```

```
□ exec hello_world;
```

Assignment 1

- Modify the procedure and print Hello “Your name” with sysdate


```
create or replace procedure add_number(a1 IN NUMBER,b1 IN NUMBER,c1  
OUT NUMBER)
```

```
as
```

```
begin
```

```
c1 :=a1+b1;
```

```
dbms_output.put_line('Sum : ' || c1);
```

```
end;
```

```
-----
```

```
DECLARE
```

```
c NUMBER;
```

```
BEGIN
```

```
add_number(1,1,c);
```

```
dbms_output.put_line('Sum : ' || c);
```

```
END;
```

Anonymous PLSQL Block

- No Name
- Not Stored in DB
- Can not be reused
- One time execution
- PLSQL to execute the PLSQL Scripts

- Modify the procedure to do the following
 1. Addition of decimals. Round it of to 2 decimals
 2. Subtraction
 3. Multiplication
 4. Division