**PL/SQL Functions**

The CREATE FUNCTION statement creates or replaces a standalone function or a call specification (for Java). A **standalone function** is a function (a subprogram that returns a single value) that is stored in the database.

CREATE OR REPLACE FUNCTION <func\_name>(<param\_list>) RETURN <return\_type> AS <function body>.

In the body of the function definition, "RETURN <expression>;" exits from the function and returns the value of <expression>.

To find out what functions you have created, use the following SQL query:

select object\_type, object\_name

from user\_objects

where object\_type = 'FUNCTION';

To drop a stored procedure/function: drop function <function\_name>;

Example 1

Write a PL/SQL function to calculate the average age of the dogs of a specified breed. Use DOGS table: DOGS(DOG\_ID, D\_NAME, YEAR\_OF\_BIRTH, BREED) or your own table with the dogs or cats.

CREATE OR REPLACE FUNCTION DOG\_AGE(P\_BREED IN dogs.breed%TYPE)

RETURN NUMBER

IS

v\_age NUMBER(5,2):= 0; -- value for age in years

BEGIN

SELECT AVG(EXTRACT(YEAR from SYSDATE)- YEAR\_OF\_BIRTH) INTO v\_age

from dogs

WHERE UPPER(P\_BREED) = UPPER(BREED);

RETURN v\_age;

END;

Example 1

Write DDL to add additional column WEIGHT\_KG, Add data (update) and write a function to calculate average weight of a dog of specified breed.