

## Task 6: Procedures, Function and Loops

AIM - To write a programming using PL/SQL Procedures, Functions and loops on number theory and business scenarios like.

1. Write a PL/SQL block that calculates the average age of players and display the result.

2. Write a PL/SQL block that inserts a new player record into the player table.

3. To create a function that returns the total number of teams in a particular cricket board.

4. To write a non-recursive PL/SQL Procedure to retrieve even-numbered players IDs registered for any tournament.

Write a PL/SQL block that calculates the average age of players and displays the result.

DECLARE

total\_age NUMBER:=0;

num\_players NUMBER:=0;

avg\_age NUMBER:=0;

BEGIN

-- USING a cursor to loop through all players

FOR player\_rec IN (SELECT Age FROM Player) LOOP

total\_age := total\_age + player\_rec.Age; -- summing up the ages

num\_players := num\_players + 1; -- counting the number of players

END LOOP;

-- calculating the average age

IF num\_players > 0 THEN

avg\_age := total\_age / num\_players;

END IF;

-- Displaying the result

DBMS\_OUTPUT.PUT\_LINE ('Total Players: ' || num\_players);

DBMS\_OUTPUT.PUT\_LINE ('Total Age: ' || total\_age);

DBMS\_OUTPUT.PUT\_LINE ('Average Age: ' || avg\_age);

END;







Write a PL/SQL block that inserts a new Player record into the Player table

DECLARE

V-PlayerID VARCHAR(6) := '&PlayerID'; -- you can generate a unique Player ID as needed

V-TeamID VARCHAR(6) := '&TeamID'; -- Replace with the actual Team ID

V-FName VARCHAR(30) := '&FName';

V-LName VARCHAR(30) := '&LName';

V-Age NUMBER(5,2) := &Age;

V-Date of Birth DATE := TO\_DATE('&DOB', 'YYYY-MM-DD'); -- Replace with the actual Date of Birth.

V-Playing Role VARCHAR(25) := '&Playing Role';

V-email VARCHAR(40) := '&email';

V-Contact-no NUMBER := &Phone; -- Replace with the actual contact number

BEGIN

INSERT INTO Player (PlayerID, TeamID, FName, LName, Age, Date of Birth, Playing Role, email, Contact-no)

VALUES (V-PlayerID, V-TeamID, V-FName, V-LName, V-Age, V-Date of Birth, V-Playing Role, V-email, V-Contact-no);

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Player record inserted successfully.');

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

ROLL BACK;

END;

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Enter the PlayerID: 676

Enter the TeamID: CCB01

Enter the FName: Rahul

Enter the LName: Sharma

Enter the Age: 23

Enter the Date of Birth: 17-07-1999

Enter the Playing Role: All Rounder

Enter the email: rahul.sharma@gmail.com



PLSQL -> Contact - No: 9297 181815  
Player Board inserted successfully.

To create a function that returns the total number of teams  
in a particular Cricket Board.

CREATE OR REPLACE FUNCTION Get Total Teams In Board (BoardID VARCHAR2)  
RETURN NUMBER IS

V\_Total Teams NUMBER := 0;

BEGIN

SELECT COUNT(\*) INTO V\_Total Teams FROM Team WHERE Board ID  
= BoardID;

RETURN V\_Total Teams;

EXCEPTION

WHEN NO - DATA - FOUND THEN

-- Handle the case when the Board doesn't exist or has no teams  
RETURN 0;

WHEN OTHERS THEN

-- Handle other exception as needed

RETURN -1; -- Return a negative value to indicate an error

END Get total Teams in Board;

/

Function Successfully created.

SQL >

Declare

number res;

Begin

res: Get total Teams In Board ('BID01');

DBMS - OUTPUT.PUT\_LINE('No of teams: ' || res);

END;

/

No of teams: 2 ✓

To write a non-recursive PL/SQL Procedure to retrieve even-numbered  
Player IDs registered for any tournament.



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CREATE OR REPLACE PROCEDURE Get Even numbered Player IDS IS
BEGIN
  FOR Player REC IN (SELECT PlayerID FROM Player WHERE TO_NUMBER(PlayerID)
MOD 2=0)
  LOOP
    DBMS_OUTPUT.PUT_LINE('Even-numbered PlayerID: '||Player.REC.PlayerID);
  END LOOP;
END Get Even Numbered PlayerIDS;
/

```

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EX NO.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	18
SIGN WITH DATE	

Result:- Thus the PL/SQL Procedures, Functions Number theory and business scenarios experiment was successfully completed and results are verified.