Task-6:- Procedures Functions and loops

Aim:- To write a program 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 displays the result.
2. write a PL/SQL block that calculates the average age of players and 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 player SIDs registered for any team

write a PL/SQL block that calculate 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 players) loop
    total_Age = total_age + player_rec; --Summing up the ages
    num_players:= num_player+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;

Output :-

Total players : 14

Total Age : 342

Average Age : 24.42

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

Declare

V_player ID VARCHAR(6) := &playerID; --- you can generate a unique player ID as needed

V_Team ID VARCHAR(6) := '&TEAM ID'; --- replace with the actual Team ID

V_F Name VARCHAR(30) := '&FName';

V_L Name VARCHAR(30) := '&LName';

V_Age NUMBER(2) := &age;

V_Date of Birth := 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 (player ID, TeamID, FName, LName, Age, Date of Birth, playing role, email contact-no)

values (v-player ID, 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 ('players record inserted successfully')

EXCEPTION

when others THEN

DBMS-output.put-line ('ERROR:'||SQLERRM);

ROLL Back;

END;

/

Enter the player ID: 676

Enter the TeamID: CCDol

Enter the FName: Rahul

Enter the LName: sharma

then the Age: 23

Enter the Date of Birth: 17-07-1999

Enter the playing role: Allrounder

Enter the email: rahulsharma@gmail.com.

Enter the contact-no: 9797181815

Player record 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
VARCHAR 2)
        return number is
    v_total number := 0;
BEGIN
Select count (*) into v_total from Team where BoardID =
BoardID;
  return v_total Teams;
    Exception
    when no_data_found Then
-- Handle case when the Board doesn't Exist or has no
Team
      RETURN 0;
When OTHERS THEN
-- HANDLE other Examptions as needed
  return -1, -- return a negative value to indicate an
error END getTotalTeams InBoard;
/
Function successfully created
  SQL>
  Declare
    number res;
      Begin
res := getTotalTeams InBoard ('B1001');
DBMS_output.put_line ('No of Teams:' || res);
  END;
/
no_of Teams: 2
```

To write a non-recursive pl/sql procedure to retrieve numbered player IDs registered for days tournament

Create or replace procedure get numbered player IDs is

Begin

For player_rec in (select player ID from player where ID. number (playerID) MOD 2=0)

Loop

DBMS_Output.Put_line ("Even-numbered player's ID:

' || player_rec.player ID);

END loop;

END; get numbered Player IDs;

/

Result:- Thus the PL/SQL procdures, functions and Coopson number, theory and business scenarios "Experiment was successfully completed and results are verified.

VEL TECH - CSE	
EX NO.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGN WITH DATE	8/