

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 displays 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 that total number of teams in a Particular cricket board.
4. To write a non-recursive PL/SQL Procedure to retrieve even-numbered Player 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;

ave-age Number := 0;

Begin

using a cursor loop through all players

for Players - 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

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 record into Player table

Declare

v-PlayerID varchar(6) := '&Player'; - you can generate a unique PlayerID as needed

v-PlayerID varchar(6) := '&TeamID'; - Replace with actual teamID.

v-Fname varchar(30) := '&fname';

v-Age number(3,2) := '&age';

v-Date of birth Date := To_Date('&DOB', 'YYYY-MM-DD');
 - Place 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 actual contact number

Begin

Insert into Player (PlayID, TeamID, FName, LName,
Date of birth)

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 (Player record inserted
successfully);

Exception

when others then

DBms-output Put Line (Error: '|| SQLERRM');

Rollback;

END;

Enter the Player ID: 676

Enter the Team ID: 11301

Enter the FName: 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

Enter the contact no: 9797181815

Player record inserted successfully.

To create a function that returns the total number of teams in 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 board doesn't exist or has
no teams

Return 0;

when others then

- Handle other exceptions 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 board('BID101');

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.

Create or replace Procedure get even numbered Player IDs is

Begin

For Player-rec in (select Player ID from Player where

TO-number(Player ID)

MOD 2 = 0)

Loop

DBMS-output.put-line (Even numbered Player ID:

|| Player-rec.Player ID);

END loop;

END get even numbered Player IDs;

/

Result:

Thus the

PL/SQL Procedures, functions and loops on number theory and business scenarios experiment was successfully completed and results are verified.

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PERFORMANCE (%)	6
QUAL AND ANALYSIS (%)	5
RECORD (%)	5
TOTAL (20)	21
SIGN WITH DATE	