Assignment 2

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Group: 5 DBS311 NCC

User Guide

To find how to use an object made by group 5: **CTRL + f** and then type the object's name.

spPlayersInsert

Parameters are of the same type as Players table :

- pld: NUMBER, 38 sig digits no decimal, playerld type
- rNum: VARCHAR(15), 15 character, regNumber type
- IName: VARCHAR(25), 25 character, lastName type
- fName: VARCHAR(25), 25 character, firstName type
- isAct: NUMBER, 38 sig digits (Range 0 to 1) no decimal, isActive type
- pErr: OUT, NUMBER,38 sig digits no decimal, playerId type

Expected Output:

You will get pErr for an output that would describe whether the insertion was successful or not. A positive number for pErr means success and a negative number means some error occurred.

Potential Error:

- When a playerld trying to be inserted when the playerld already exists.
- isAct is not in the range of 0 or 1.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to insert a new Player's information in the database.

spPlayersUpdate

Parameters are of same type as Players table :

- pld: NUMBER, 38 sig digits no decimal, playerld type
- rNum: VARCHAR(15), 15 character, regNumber type
- IName: VARCHAR(25), 25 character, lastName type
- fName: VARCHAR(25), 25 character, firstName type
- isAct: NUMBER, 38 sig digits (Range 0 to 1) no decimal, isActive type
- pErr: OUT, NUMBER,38 sig digits no decimal, playerId type

Expected Output:

You will get pErr for an output that would describe whether the update was successful or not. A positive number for pErr means success and a negative number means some error.

Potential Error:

- When playerld trying to be updated when the playerld does not exist.
- isAct is not in the range of 0 or 1.
- Updating wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to update a Player's information in the database.

spPlayersDelete

Parameters are of the same type as the Players table :

- pld: NUMBER, 38 sig digits no decimal, playerld type
- pErr: OUT, NUMBER, 38 sig digits, playerId type

Expected Output:

You will get pErr for an output that would describe whether the removal was successful or not. A positive number for pErr means success and a negative number means some error.

Potential Error:

- When the same playerld trying to be deleted when the playerld does not exist.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to delete new Player' information in the database.

```
DECLARE
    errP players.playerId%type;
BEGIN

spPlayersUpdate(123, errP);
IF errP > 0 THEN
        DBMS_OUTPUT.PUT_LINE('Delete Success!');
ELSIF errP = -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF errP = -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF errP = -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows deleted!');
END IF;
END;
```

spPlayersSelect

Parameters are of same type as Players table :

- pld: NUMBER, 38 sig digits no decimal, playerld type
- rNum: OUT, VARCHAR(15), 15 character, regNumber type
- IName: OUT, VARCHAR(25), 25 character, lastName type
- fName: OUT, VARCHAR(25), 25 character, firstName type
- isAct: OUT, NUMBER, 38 sig digits (Range 0 to 1) no decimal, isActive type
- pErr: OUT, NUMBER,38 sig digits no decimal, playerId type

Expected Output:

You will get pErr for an output that would describe whether the SELECT INTO was successful or not. A positive number for pErr means success and a negative number means some error.

Potential Error:

- When playerId trying to be selected for output when a player does not exist or
- Too many players exists.
- Insert wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to get a Player's information in the database.

```
DECLARE
     errP players.playerId%type;
     pId players.playerId%type := 123;
     rNum players.regNumber%type;
     lName players.lastName%type;
     fName players.firstName%type;
     isAct players.isActive%type;
BEGIN
     BEGIN
     spPlayersSelect(pId, rNum, lName, fName, isAct, errP);
     IF errP > 0 THEN
          DBMS OUTPUT.PUT LINE('Player ID: ' || pId);
          DBMS OUTPUT.PUT LINE('Player Reg Num: ' || rNum);
          DBMS OUTPUT.PUT LINE('Player Last Name: ' ||
          lName);
          DBMS OUTPUT.PUT LINE('Player First Name: ' ||
          DBMS_OUTPUT.PUT_LINE('Player Is Active: ' ||
          isAct);
     ELSIF errP = -1 THEN
          DBMS OUTPUT.PUT LINE('ERROR: No data found!');
     ELSIF errP = -2 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Too many rows!');
     ELSIF errP = -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Others!');
     END IF;
```

spSILocationsInsert

Parameters are of same type as SILocations table :

- IId: NUMBER, 38 sig digits no decimal, locationId type
- locName: VARCHAR(50), 50 character, locationName type
- IField: NUMBER, 38 sig digits no decimal, fieldLength type
- isAct: NUMBER, 38 sig digits (Range 0 to 1) no decimal, isActive type
- IErr: OUT, NUMBER,38 sig digits no decimal, locationId type

Expected Output:

You will get IErr for an output that would describe whether the insertion was successful or not. A positive number for IErr means success and a negative number means some error occurred.

Potential Error:

- When a locationId trying to be inserted when the locationId already exists.
- isAct is not in the range of 0 or 1.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to insert a new Location's information in the database.

```
DECLARE
    errL slLocations.locationId%type;

BEGIN

spSlLocationsInsert(123, 'Stadium', 35, 1, errL);

IF errL > 0 THEN
        DBMS_OUTPUT.PUT_LINE('Insert Success!');

ELSIF errL = -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');

ELSIF errL = -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');

ELSIF errL = -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows inserted!');

END;
END;
```

spSILocationsUpdate

Parameters are of the same type as SILocations table :

- IId: NUMBER, 38 sig digits no decimal, locationId type
- locName: VARCHAR(50), 50 character, locationName type
- IField: NUMBER, 38 sig digits no decimal, fieldLength type
- isAct: NUMBER, 38 sig digits (Range 0 to 1) no decimal, isActive type
- IErr: OUT, NUMBER,38 sig digits no decimal, locationId type

Expected Output:

You will get IErr for an output that would describe whether the update was successful or not. A positive number for IErr means success and a negative number means some error.

Potential Error:

- When locationId trying to be updated when the locationId does not exist.
- isAct is not in the range of 0 or 1.
- Updating wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to update a Location's information in the database.

```
DECLARE
    errL slLocations.locationId%type;
BEGIN

spSlLocationsUpdate(123, 'Stadium', 35, 1, errL);
IF errL > 0 THEN
        DBMS_OUTPUT.PUT_LINE('Update Success!');
ELSIF errL = -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF errL = -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF errL = -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows updated!');
END;
END;
```

spSILocationsDelete

Parameters are of the same type as SILocations table :

- IId: NUMBER, 38 sig digits no decimal, locationId type
- IErr: OUT, NUMBER,38 sig digits no decimal, locationId type

Expected Output:

You will get IErr for an output that would describe whether the delete was successful or not. A positive number for IErr means success and a negative number means some error.

Potential Error:

- When the same locationId trying to be deleted when the locationId does not exist.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to delete a Location's information in the database.

```
DECLARE
    errL slLocations.locationId%type;

BEGIN

spSlLocationsDelete(123, errL);
IF errL > 0 THEN
        DBMS_OUTPUT.PUT_LINE('Delete Success!');

ELSIF errL = -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');

ELSIF errL = -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');

ELSIF errL = -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows delete!');
END;
END;
```

spSILocationsSelect

Parameters are of the same type as the SILocations table :

- IId: NUMBER, 38 sig digits no decimal, locationId type
- locName: OUT, VARCHAR(50), 50 character, locationName type
- IField: OUT, NUMBER, 38 sig digits no decimal, fieldLength type
- isAct: OUT, NUMBER, 38 sig digits (Range 0 to 1) no decimal, isActive type
- IErr: OUT, NUMBER,38 sig digits no decimal, locationId type

Expected Output:

You will get IErr for an output that would describe whether the SELECT INTO was successful or not. A positive number for IErr means success and a negative number means some error.

Potential Error:

- When locationId trying to be selected for output when a location does not exist or
- Too many locations exist.
- Insert wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to get a Location's information in the database.

```
DECLARE
     errL slLocation.locationId%type;
     lId slLocations.locationId%type := 123;
     locName slLocations.locationName%type;
     lField slLocations.fieldLength%type;
     isAct slLocations.isActive%type;
BEGIN
     BEGIN
     spPlayersSelect(lId, locName, lField, isAct, errL);
     IF errL > 0 THEN
           DBMS OUTPUT.PUT LINE('SlLocation ID: ' || LId);
          DBMS OUTPUT.PUT LINE('SlLocation Name: ' ||
          locName);
          DBMS OUTPUT.PUT LINE('SlLocation Field Length: '
           || lField);
          DBMS OUTPUT.PUT LINE('SlLocation Is Active: ' ||
          isAct);
     ELSIF errL = -1 THEN
          DBMS OUTPUT.PUT LINE('ERROR: No data found!');
     ELSIF errL = -2 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Too many rows!');
     ELSIF errL = -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Others!');
     END IF;
END;
```

spGoalScorersInsert

Parameters would be:

- gld: NUMBER, 38 sig digits no decimal, goalld type
- gmld: NUMBER, 38 sig digits no decimal, gameld type
- pld: NUMBER, 38 sig digits no decimal, playerld type
- tld: NUMBER, 38 sig digits no decimal, teamld type
- numG: NUMBER, 38 sig digits no decimal, numGoals type
- numAss: NUMBER, 38 sig digits no decimal, numAssists type
- gsErr: OUT, NUMBER,38 sig digits no decimal, goalld type

Expected Output:

You will get gsErr for an output that would describe whether the insertion was successful or not. A positive number for gsErr means that goalld was returned as NULL was inserted for gld,

if gsErr is 0 that means that a row was inserted and a negative number means some error occurred, for instance for -3, no rows inserted, and for -1, no data found, and for -2, too many rows, and for -4, it is a value error and, for -5, it is other error.

Potential Error:

- When a goalld trying to be inserted when the goalld already exists.
- Inserting wrong values, for example trying to insert characters in a number parameter.
- no rows inserted.
- no data found.
- too many rows.
- value error.

Purpose:

It is made for software to contact Oracle to insert new goalScorers information in the database.

```
DECLARE
errGs goalScorers.goalId%type;

BEGIN

spGoalScorersInsert(NULL, 30, 111222, 200, 2, 0, errGs);

IF errGs > 0 THEN

DBMS_OUTPUT.PUT_LINE('Insert Success, ID: ' ||

errGs);

ELSIF errGs = 0 THEN

DBMS_OUTPUT.PUT_LINE('Insert Success!');

ELSIF errGs = -1 THEN

DBMS_OUTPUT.PUT_LINE('ERROR: No Data Found!');

ELSIF errGs = -2 THEN

DBMS_OUTPUT.PUT_LINE('ERROR: Too Many Rows!');

ELSIF errGs = -3 THEN

DBMS_OUTPUT.PUT_LINE('ERROR: No rows inserted!');
```

spGoalScorersUpdate

Parameters would be:

- gld: NUMBER, 38 sig digits no decimal, goalld type
- gmld: NUMBER, 38 sig digits no decimal, gameld type
- pld: NUMBER, 38 sig digits no decimal, playerld type
- tld: NUMBER, 38 sig digits no decimal, teamld type
- numG: NUMBER, 38 sig digits no decimal, numGoals type
- numAss: NUMBER, 38 sig digits no decimal, numAssists type
- gsErr: OUT, NUMBER,38 sig digits no decimal, goalld type

Expected Output:

You will get gsErr for an output that would describe whether the update was successful or not. A positive number for gsErr means success and a negative number means some error.

Potential Error:

- When goalld trying to be updated when the goalld does not exist.
- Updating wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to update a goalScorer's information in the database.

spGoalScorersDelete

Parameters are of the same type as the goalScorers table :

- gld: NUMBER, 38 sig digits no decimal, goalld type
- gsErr: OUT, NUMBER, 38 sig digits, goalld type

Expected Output:

You will get gsErr for an output that would describe whether the removal was successful or not. A positive number for gsErr means success and a negative number means some error.

Potential Error:

- When the same goalld trying to be deleted when the goalld does not exist.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to delete new goalScorer's information in the database.

```
DECLARE
    errGs goalScorers.goalId%type;
BEGIN

spGoalScorersDelete(123, errGs);
IF errGs> 0 THEN
        DBMS_OUTPUT.PUT_LINE('Delete Success!');
ELSIF errGs= -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF errGs= -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF errGs= -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows delete!');
END;
END;
```

spGoalScorersSelect

Parameters are of same type as Players table :

- gld IN goalScorers.goalId%type,
- gmld OUT goalScorers.gameId%type,
- pld OUT goalScorers.playerId%type,
- tld OUT goalScorers.teamId%type,
- numG OUT goalScorers.numgoals%type,
- numAss OUT goalScorers.numassists%type,
- gsErr OUT goalScorers.goalId%type

Expected Output:

You will get gsErr for an output that would describe whether the SELECT INTO was successful or not. A positive number for gsErr means success and a negative number means some error.

Potential Error:

- When goalld trying to be selected for output when a goal does not exist or
- Too many goalscorers exists.
- Insert wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to get a goalScorers's information in the database.

```
DECLARE
          gId goalScorers.goalId%type,
          gmId goalScorers.gameId%type,
          pId goalScorers.playerId%type,
         tId goalScorers.teamId%type,
         numG goalScorers.numgoals%type,
         numAss goalScorers.numassists%type,
         errGs goalScorers.goalId%type
     BEGIN
          BEGIN
          spGoalScorersSelect(gId, gmId, pId, tId, numG, numAss,
errGs);
          IF errGs> 0 THEN
                DBMS OUTPUT.PUT LINE('Row selection Success!');
          ELSIF errGs= -1 THEN
                DBMS OUTPUT.PUT LINE('ERROR: Wrong values!');
          ELSIF errGs= -2 THEN
                DBMS OUTPUT.PUT LINE('ERROR: too many Rows!');
          ELSIF errGs= -3 THEN
                DBMS OUTPUT.PUT LINE('ERROR: Others!');
          END IF;
     END;
```

spRostersInsert

Parameters would be:

- rld: NUMBER, 38 sig digits no decimal, rosterld type
- pld: NUMBER, 38 sig digits no decimal, playerld type
- tld: NUMBER, 38 sig digits no decimal, teamld type
- isAct: NUMBER, 38 sig digits no decimal, isActive type
- jrNum: NUMBER, 38 sig digits no decimal, jerseyNumber type
- rsErr: OUT, NUMBER,38 sig digits no decimal, rosterId type

Expected Output:

You will get rsErr for an output that would describe whether the insertion was successful or not. A positive number for rsErr means that rosterId was returned as NULL was inserted for rsId.

if rsErr is 0 that means that a row was inserted and a negative number means some error occurred, for instance for -3, no rows inserted, and for -1, no data found, and for -2, too many rows, and for -4, it is a value error and, for -5, it is other error.

Potential Error:

- When a rosterId is trying to be inserted when the rosterId already exists.
- Inserting wrong values, for example trying to insert characters in a number parameter.
- no rows inserted.
- no data found.
- too many rows.
- value error.

Purpose:

It is made for software to contact Oracle to insert a new roster's information in the database.

```
DECLARE
     errRs rosters.rosterId%type;
BEGIN
     spRostersInsert(NULL, 111222, 200, 1, 55, errRs);
     IF errRs> 0 THEN
          DBMS OUTPUT.PUT LINE('Insert Success!');
     ELSIF errRs= -1 THEN
          DBMS OUTPUT.PUT LINE ('ERROR: No Data Found!');
     ELSIF errRs= -2 THEN
          DBMS OUTPUT.PUT LINE ('ERROR: Too Many Rows!');
     ELSIF errRs= -3 THEN
          DBMS OUTPUT.PUT LINE ('ERROR: No rows inserted!');
     ELSIF errRs= -4 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Wrong Value!');
     ELSIF errRs= -5 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Others!');
     END IF;
END;
```

spRostersUpdate

Parameters would be:

- rld: NUMBER, 38 sig digits no decimal, rosterld type
- pld: NUMBER, 38 sig digits no decimal, playerld type
- tld: NUMBER, 38 sig digits no decimal, teamld type
- isAct: NUMBER, 38 sig digits no decimal, isActive type
- jrNum: NUMBER, 38 sig digits no decimal, jerseyNumber type
- rsErr: OUT, NUMBER,38 sig digits no decimal, rosterId type

Expected Output:

You will get rsErr for an output that would describe whether the update was successful or not. A positive number for rsErr means success and a negative number means some error.

Potential Error:

- When rosterld trying to be updated when the rosterld does not exist.
- isAct is not in the range of 0 or 1.
- Updating wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to update a roster's information in the database.

spRostersDelete

Parameters are of the same type as the rosters table :

- rld: NUMBER, 38 sig digits no decimal, rosterld type
- rsErr: OUT, NUMBER, 38 sig digits, rosterId type

Expected Output:

You will get rsErr for an output that would describe whether the removal was successful or not. A positive number for rsErr means success and a negative number means some error.

Potential Error:

- When the same rosterld trying to be deleted when the rosterld does not exist.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to delete new roster's information in the database.

```
DECLARE
    errRs spRostersDelete.rosterId%type;
BEGIN

spRostersDelete(123, errRs);
IF errRs> 0 THEN
        DBMS_OUTPUT.PUT_LINE('Delete Success!');
ELSIF errRs= -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF errRs= -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF errRs= -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows delete!');
END;
END;
```

spRostersSelect

Parameters are of same type as Players table :

- rld IN rosters.rosterld%type,
- pld OUT rosters.playerId%type,
- tld OUT rosters.teamId%type,
- isAct OUT rosters.isActive%type,
- jrNum OUT rosters.jerseyNumber%type,
- rsErr OUT rosters.rosterId%type

Expected Output:

You will get rsErr for an output that would describe whether the SELECT INTO was successful or not. A positive number for rsErr means success and a negative number means some error.

Potential Error:

- When rosterId trying to be selected for output when a roster does not exist or
- Too many roster exists.
- Insert wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to get a roster's information in the database.

```
DECLARE
     rId rosters.rosterId%type,
     pId rosters.playerId%type,
     tId rosters.teamId%type,
     isAct rosters.isActive%type,
     jrNum rosters.jerseyNumber%type,
     rsErr rosters.rosterId%type
BEGIN
     BEGIN
     spRostersSelect(rId, pId, tId, isAct, jrNum, errRs);
     IF errRs> 0 THEN
          DBMS OUTPUT.PUT LINE('Row selection Success!');
     ELSIF errRs= -1 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Wrong values!');
     ELSIF errRs= -2 THEN
          DBMS OUTPUT.PUT LINE('ERROR: too many Rows!');
     ELSIF errRs= -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Others!');
     END IF;
END;
```

spTeamsInsert

Parameters would be:

- tld: NUMBER, 38 sig digits no decimal, teamld typed type
- tName: VARCHAR(10), 10 character, tname type
- isAct: NUMBER, 38 sig digits(range 0 to 1) no decimal, isActive type
- jerseyColour: VARCHAR2(10), 10 character, jerseyColour type
- tErr: OUT, NUMBER,38 sig digits no decimal, teamld type

Expected Output:

You will get tErr for an output that would describe whether the insertion was successful or not. A positive number for tErr means that teamId was returned as NULL was inserted for tId, if tErr is 0 that means that a row was inserted and a negative number means some error occurred, for instance for -3, no rows inserted, and for -1, no data found, and for -2,too many rows, and for -4, it is value error and, for -5, it is other errors.

Potential Error:

- When a teamld is trying to be inserted when the teamld already exists.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to insert a new team's information in the database.

```
DECLARE
     tErr teams.teamId%type;
BEGIN
     spTeamsInsert(123, 'Prac', 1, 'Test', tErr);
     IF tErr > 0 THEN
          DBMS OUTPUT.PUT LINE('Insert Success!');
     ELSIF tErr = -1 THEN
          DBMS OUTPUT.PUT LINE('ERROR: no data found!');
     ELSIF tErr = -2 THEN
          DBMS OUTPUT.PUT LINE('ERROR: too many rows!');
     ELSIF tErr = -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: No rows inserted!');
     ELSIF tErr = -4 THEN
          DBMS OUTPUT.PUT LINE('ERROR: wrong values!');
     ELSIF tErr = -5 THEN
          DBMS OUTPUT.PUT LINE('ERROR: others!');
     END IF;
END;
```

spTeamsUpdate

Parameters would be:

- tld: NUMBER, 38 sig digits no decimal, teamld typed type
- tName: VARCHAR(10), 10 character, tname type
- isAct: NUMBER, 38 sig digits(range 0 to 1) no decimal, isActive type
- jerseyColour: VARCHAR2(10), 10 character, jerseyColour type
- tErr: OUT, NUMBER,38 sig digits no decimal, teamld type

Expected Output:

You will get tErr for an output that would describe whether the update was successful or not. A positive number for tErr means success and a negative number means some error.

Potential Error:

- When teamld trying to be updated when the teamld does not exist.
- isAct is not in the range of 0 or 1.
- Updating wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to update a Player's information in the database.

```
DECLARE
    errP teams.teamId%type;
BEGIN

spteamsUpdate(123, '123456', 'Prac', 'Test', 1, errP);
IF errP > 0 THEN
        DBMS_OUTPUT.PUT_LINE('Update Success!');
ELSIF errP = -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF errP = -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF errP = -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows updated!');
END;
END;
```

spTeamsDelete

Parameters would be:

- tld: NUMBER, 38 sig digits no decimal, teamld typed type
- tErr: OUT, NUMBER,38 sig digits no decimal, teamld type

Expected Output:

You will get tErr fowar an output that would describe whether the delete was successful or not. A positive number for tErr means success and a negative number means some error.

Potential Error:

- When the same teamld trying to be deleted when the teamld does not exist.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to delete a Location's information in the database.

```
DECLARE
    tErr teams.teamId%type;
BEGIN

spteamsDelete(123, tErr);
IF errL > 0 THEN
        DBMS_OUTPUT.PUT_LINE('Delete Success!');
ELSIF errL = -1 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF errL = -2 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF errL = -3 THEN
        DBMS_OUTPUT.PUT_LINE('ERROR: No rows delete!');
END;
END;
```

spTeamsSelect

Parameters would be:

- tld: NUMBER, 38 sig digits no decimal, teamld typed type
- tName: VARCHAR(10), 10 character, tname type
- isAct: NUMBER, 38 sig digits(range 0 to 1) no decimal, isActive type
- jerseyColour: VARCHAR2(10), 10 character, jerseyColour type
- tErr: OUT, NUMBER,38 sig digits no decimal, teamld type

Expected Output:

You will get pErr for an output that would describe whether the SELECT INTO was successful or not. A positive number for tErr means success and a negative number means some error.

Potential Error:

- When teamId trying to be selected for output when a player does not exist or
- Too many players exists.
- Insert wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to get a Player's information in the database

```
DECLARE
          tErr teams.teamId%type;
          tId teams.teamId%type := 123;
          tName teams.teamName%type;
          isAct players.isActive%type;
BEGIN
          BEGIN
          spPlayersSelect(tId, tName, isAct, tErr);
          IF tErr > 0 THEN
                DBMS OUTPUT.PUT LINE('Team ID: ' | | tid);
                DBMS OUTPUT.PUT LINE('Team Name: ' || tName);
                DBMS OUTPUT.PUT LINE('Player Last Name: ' ||
                lName);
                DBMS OUTPUT.PUT LINE('Player Is Active: ' ||
                isAct);
          ELSIF errP = -1 THEN
                DBMS OUTPUT.PUT LINE('ERROR: No data found!');
          ELSIF tErr = -2 THEN
                DBMS OUTPUT.PUT LINE('ERROR: Too many rows!');
          ELSIF tErr = -3 THEN
                DBMS OUTPUT.PUT LINE('ERROR: Others!');
          END IF;
     END;
```

spGamesInsert

Parameters would be:

- gld: NUMBER, 38 sig digits no decimal, gameId typed type
- dID: NUMBER, 38 sig digits no decimal, divld typed type
- gNum:NUMBER, 38 sig digits no decimal, gameNum type
- gDateTime: DATE,
- gHTeam:NUMBER, 38 sig digits no decimal, gHTeam type
- gVTeam:NUMBER, 38 sig digits no decimal, gVTeam type
- gHScore:NUMBER, 38 sig digits no decimal, gHScore type
- gVScore:NUMBER, 38 sig digits no decimal, gVScore type
- gLocationId:NUMBER, 38 sig digits no decimal, gLocationId type
- gisPlayed:NUMBER, 38 sig digits no decimal, gisPlayed type
- gNotes: VARCHAR (20), 20 character, gNotes type
- gErr: OUT, NUMBER,38 sig digits no decimal, gameld type

Expected Output:

You will get gErr for an output that would describe whether the insertion was successful or not. A positive number for gErr means that teamld was returned as NULL was inserted for gld, if gErr is 0 that means that a row was inserted and a negative number means some error occurred, for instance for -3, no rows inserted, and for -1, no data found, and for -2,too many rows, and for -4, it is value error and, for -5, it is other errors.

Potential Error:

- When a gameld is trying to be inserted when the gameld already exists.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to insert a new team's information in the database.

```
DECLARE
     gErr games.gameId%type;
BEGIN
     spGamesInsert(123, 2, 3, To date('12-01-2022',
           'dd-mm-yyyy'),212, 0, 300,
          0, 11, 0, NULL, gErr);
     IF gErr > 0 THEN
          DBMS OUTPUT.PUT LINE('Insert Success!');
     ELSIF gErr = -1 THEN
          DBMS OUTPUT.PUT LINE('ERROR: no data found!');
     ELSIF gErr = -2 THEN
          DBMS OUTPUT.PUT LINE('ERROR: too many rows!');
     ELSIF gErr = -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: No rows inserted!');
     ELSIF gErr = -4 THEN
          DBMS OUTPUT.PUT LINE('ERROR: wrong values!');
     ELSIF gErr = -5 THEN
          DBMS OUTPUT.PUT LINE('ERROR: others!');
```

END IF;

END;

spGamesUpdate

Parameters would be:

- gld: NUMBER, 38 sig digits no decimal, gameId typed type
- dID: NUMBER, 38 sig digits no decimal, divId typed type
- gNum:NUMBER, 38 sig digits no decimal, gameNum type
- gDateTime: DATE,
- gHTeam:NUMBER, 38 sig digits no decimal, teamld type
- gHScore:NUMBER, 38 sig digits no decimal, homeScore type
- gVTeam:NUMBER, 38 sig digits no decimal, teamId type
- gVScore:NUMBER, 38 sig digits no decimal, visitScore type
- gLocationId:NUMBER, 38 sig digits no decimal, locationId type
- gisPlayed:NUMBER, 38 sig digits no decimal, isPlayed type
- gNotes: VARCHAR (20), 20 character, notes type
- gErr: OUT, NUMBER,38 sig digits no decimal, gameld type

Expected Output:

You will get gErr for an output that would describe whether the update was successful or not. A positive number for gErr means success and a negative number means some error.

Potential Error:

- When gamesId trying to be updated when the gamesId does not exist.
- isAct is not in the range of 0 or 1.
- Updating wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to update a Player's information in the database.

```
DECLARE
     gErr games.gamesId%type;
BEGIN
     spGamesUpdate(123,2,3,To date('12-01-2022',
           'dd-mm-yyyy'),212, 0, 300,
          0, 11, 0, NULL, gErr);
     IF qErr > 0 THEN
          DBMS_OUTPUT.PUT_LINE('Update Success!');
     ELSIF gErr = -1 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Wrong values!');
     ELSIF gErr = -2 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Others!');
     ELSIF qErr = -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: No rows updated!');
     END IF;
END;
```

spGamesDelete

Parameters would be:

- gld: NUMBER, 38 sig digits no decimal, gamesId typed type
- gErr: OUT, NUMBER,38 sig digits no decimal, gamesId type

Expected Output:

You will get gErr for an output that would describe whether the delete was successful or not. A positive number for gErr means success and a negative number means some error.

Potential Error:

- When the same gameld trying to be deleted when the gameld does not exist.
- Inserting wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to delete a Game's information in the database.

```
DECLARE
    gErr games.gamesId%type;
BEGIN

spGamesDelete(123, gErr);
IF gErr > 0 THEN
         DBMS_OUTPUT.PUT_LINE('Delete Success!');
ELSIF gErr = -1 THEN
         DBMS_OUTPUT.PUT_LINE('ERROR: Wrong values!');
ELSIF gErr = -2 THEN
         DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
ELSIF gErr = -3 THEN
         DBMS_OUTPUT.PUT_LINE('ERROR: No rows delete!');
END;
END;
END;
```

spGamesSelect

Parameters would be:

- gld: NUMBER, 38 sig digits no decimal, gameld type
- dID: OUT, NUMBER, 38 sig digits no decimal, divId type
- gNum: OUT, NUMBER, 38 sig digits no decimal, gameNum type
- gDateTime: OUT, DATE,
- gHTeam: OUT, NUMBER, 38 sig digits no decimal, teamld type
- gHScore: OUT,NUMBER, 38 sig digits no decimal, homeScore type
- gVTeamOUT,:NUMBER, 38 sig digits no decimal, teamId type
- gVScore: OUT,NUMBER, 38 sig digits no decimal, visitScore type
- gLocationId: OUT,NUMBER, 38 sig digits no decimal, locationId type
- gisPlayed: OUT,NUMBER, 38 sig digits no decimal, isPlayed type
- gNotes: OUT, VARCHAR (20), 20 character, notes type
- gErr: OUT, NUMBER,38 sig digits no decimal, gameld type

Expected Output:

You will get gErr for an output that would describe whether the SELECT INTO was successful or not. A positive number for gErr means success and a negative number means some error.

Potential Error:

- When gameld trying to be selected for output when a gameld does not exist or
- Too many games exist.
- Insert wrong values, for example trying to insert characters in a number parameter.

Purpose:

It is made for software to contact Oracle to get a Game's information in the database

```
DECLARE
     gErr games.gameId%type;
     qId games.gameId%type := 123;
     dId games.divId%type;
     gNum games.gameNum%type;
     gDateTime games.DateTime%type;
     gHTeam games.homeTeam%type;
     gVteam games.visitTeam%type;
     gHscore games.homeScore%type;
     gVscore games.visitScore%type;
     gLocationId games.locationID%type;
     gisPlayed games.isPlayed%type;
     gNotes games.notes%type;
BEGIN
     BEGIN
     spGamesSelect(gId,dId,gNum,gDateTime,gHteam, gHscore,
```

```
gVteam, gVscore, gLocationId, gisPlayed, gNotes,
     gErr);
IF gErr > 0 THEN
     DBMS_OUTPUT.PUT_LINE('Game ID: ' || gId);
     DBMS_OUTPUT.PUT_LINE('Div ID: ' | | dId);
     DBMS OUTPUT.PUT LINE ('Game Number ' | | gNum);
     DBMS OUTPUT.PUT LINE('Date Time: ' || gDateTime);
     DBMS OUTPUT.PUT LINE('Home Team: ' || gHteam);
     DBMS OUTPUT.PUT LINE('Visitor Team: ' || gVteam);
     DBMS OUTPUT.PUT LINE('Home Score: ' || gHScore);
     DBMS OUTPUT.PUT LINE('Visitor Score: ' ||
qVScore);
     DBMS OUTPUT.PUT LINE('Location Id: ' ||
gLocationId);
     DBMS OUTPUT.PUT LINE('Notes: ' || gNotes);
ELSIF gErr = -1 THEN
     DBMS OUTPUT.PUT LINE('ERROR: No data found!');
ELSIF gErr = -2 THEN
     DBMS OUTPUT.PUT LINE('ERROR: Too many rows!');
ELSIF tErr = -3 THEN
     DBMS_OUTPUT.PUT_LINE('ERROR: Others!');
END IF;
END;
```

spGamesOutput

Parameter:

NA

Expected Output:

the procedure will display all games' information. If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on games. It will display every field of every row of games table.

```
BEGIN
     spGamesOutput;
END;
```

spPlayersOutput

Parameter:

NA

Expected Output:

the procedure will display all player' information. If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on players. It will display every field of every row of player's table.

```
BEGIN
     spPlayersOutput;
END;
```

spTeamsOutput

Parameter:

NA

Expected Output:

The procedure will display all teams' information. If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on teams. It will display every field of every row of teams's table.

```
BEGIN
     spTeamsOutput;
END;
```

spGoalScorersOutput

Parameter:

NA

Expected Output:

The procedure will display all goalScorer' information. If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on goalScorer. It will display every field of every row of goalScorer's table.

spRosterOutput

Parameter:

NA

Expected Output:

The procedure will display all Roster' information. If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on Roster. It will display every field of every row of Roster's table.

spSILocationsOutput

Parameter:

NA

Expected Output:

the procedure will display all slLocations' information. If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on slLocations. It will display every field of every row of slLocations's table.

vwPlayerRosters

Parameter: N/A

Expected Output: N/A

Potential Errors: N/A

Purpose:

It is not an object but a view that is used in the database. It uses fields from players, rosters and team to make a bulkier table, which consists of all of this table's information, which is used in objects of our database.

spTeamRosterByld

Parameter:

• tld: NUMBER, 38 sig digits no decimal, teamld type in the teams table

Expected Output:

With a valid tld input, the procedure will display all players' information that belongs to the teamld (tld). If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in a variable.
- If no data was found, display "No data found!".

Purpose:

It is used to get information on players in a specific Team by using teamld. It will display team rosters, with names for a teamld.

```
BEGIN
     spTeamRosterById(123);
END;
```

spTeamRosterByName

Parameter:

• tName: VARCHAR2(10), 10 characters, teamName type in the teams table

Expected Output:

With a valid tName input, the procedure will display all players' information that belongs to a similar teamName or part of teamName(tName). If any error occurs, it will display what kind of error happened.

Potential Errors:

- Rowtype mismatch when fetching cursor's row and inserting in variable.
- If no data was found (not an error but it will show no data found).
- Wrong datatype input for the parameter.

Purpose:

It is used to get information on players in a specific Team by using teamName. It will display team rosters, with names for a similar teamName or part of teamName.

```
BEGIN
     spTeamRosterByName('son');
END;
```

vwTeamsNumPlayers

Parameter: N/A

Expected Output: N/A

Potential Errors: N/A

Purpose:

It is not an object but a view that is used in the database. It uses fields from players and teams to make a bulkier table, which consists of all of this table's information, which is used in objects of our database.

fncNumPlayersByTeamID

Parameter:

tld: NUMBER, 38 sig digits no decimal, teamld type

Expected Output:

It will return the number of players that exist in a team. The function's parameter is of teamId which then counts the number of players in that teamId. If it returns negative values -1,-2, or -3, that means it has errors and will display what errors have occurred and if it is a positive value, that is the number of players in that team.

Potential Errors:

- If there is no team for the parameter teamld, then there will be no data found.
- If there are too many teams for the parameter teamld, then there will be too many rows

Purpose:

It is used to get the number of players using teamid. This function will accept team id as a parameter and will further search for the same in the vwTeamsNumPlayers view, and will display results if no error is found.

vwSchedule

Parameter: NA	
Expected Output: NA	
Potential Errors: NA	

Purpose:

It is not an object but a view that is used in the database. It is using three tables, teams, slLocations ,and games to make a bulkier table, which consists of all of these table's information, which is used in objects of our database.

Non-saved procedural code:

NA

spSchedUpcomingGames

Parameter:

• numDay: INT, Integer, -2,147,483,648 to 2,147,483,647, to have a max range of days for scheduled games (upcoming).

Expected Output:

To have a full display of games that will be happening in the future. If numDay input is out of scope or no games will be played during the numDay, then it will show No data found.

Potential Errors:

- If wrong input for numDay was given, for example trying to input character to an INT datatype
- If no data was found (not an error but it will show no data found).
- Rowtype mismatch when fetching cursor's row and inserting in the variable.

Purpose:

The procedure will give information on the games that will be happening during the range of date given in the parameter. This gives a report with all the fields in the vwScheduled view.

```
BEGIN
    spSchedUpcomingGames(10);
END;
```

spSchedPastGames

Parameter:

• numDay: INT, Integer, -2,147,483,648 to 2,147,483,647, to have a max range of days for scheduled games (past).

Expected Output:

To have a full display of games that have already happened in the past. If numDay input is out of scope or no games were played during the numDay, then it will show No data found.

Potential Errors:

- If wrong input for numDay was given, for example trying to input character to an INT datatype
- If no data was found (not an error but it will show no data found).
- Rowtype mismatch when fetching cursor's row and inserting in the variable.

Purpose:

The procedure will give information on the games that happened during the range of dates given in the parameter. This gives a report with all the fields in the vwScheduled view.

fncTopScorer

Parameter: N/A

Expected Output:

This function will output a playerld of the top scoring player in the league.

Potential Errors:

- If no data was found from the SELECT INTO statement
- If too many rows were found from the SELECT INTO statement

Purpose:

This function's purpose is to give playerId when called so if the top scorer's information is required in a SELECT statement, playerId from this function can be used to get all the corresponding data related to the player.

```
DECLARE
     errP players.playerId%type;
     pId players.playerId%type := fncTopScorer;
     rNum players.regNumber%type;
     lName players.lastName%type;
     fName players.firstName%type;
     isAct players.isActive%type;
BEGIN
     BEGIN
     spPlayersSelect(pId, rNum, lName, fName, isAct, errP);
     IF errP > 0 THEN
          DBMS OUTPUT.PUT LINE('Player ID: ' || pId);
          DBMS OUTPUT.PUT LINE('Player Reg Num: ' || rNum);
          DBMS_OUTPUT.PUT_LINE('Player Last Name: ' ||
          lName);
          DBMS OUTPUT.PUT LINE('Player First Name: ' ||
          fName);
          DBMS OUTPUT.PUT LINE('Player Is Active: ' ||
          isAct);
     ELSIF errP = -1 THEN
          DBMS_OUTPUT.PUT_LINE('ERROR: No data found!');
     ELSIF errP = -2 THEN
          DBMS_OUTPUT.PUT_LINE('ERROR: Too many rows!');
     ELSIF errP = -3 THEN
          DBMS OUTPUT.PUT LINE('ERROR: Others!');
     END IF;
END;
```