

EXPERIMENT: 8

Aim: Programs development using creation of procedures, passing parameters IN and OUT of PROCEDURES.

PL/SQL Procedures

PL/SQL procedures create using CREATE PROCEDURE statement. The major difference between PL/SQL function or procedure, function return always value where as procedure may or may not return value.

When you create a function or procedure, you have to define IN/OUT/INOUT parameters parameters.

1. **IN:** Input-only parameters, which provide values to the stored procedure.
2. **OUT:** Output-only parameters, which return values from the stored procedure to the calling program.
3. **IN OUT:** Both IN OUT parameter referring to the procedure or function to pass both IN OUT parameter, modify/update by the function or procedure and also get returned.

IN/OUT/INOUT parameters you define in procedure argument list that get returned back to a result. When you create the procedure default IN parameter is passed in argument list. It's means value is passed but not returned.

Syntax for procedures:

```
CREATE OR REPLACE PROCEDURE procedurename
    ( argument , IN, OUT, IN , OUT - datatype,...) , IS | AS -
[local declarations ];
BEGIN
PL/SQL                subprogram        body;
[EXCEPTION
                Exception PL/SQL block; ]
END;
```

SQL> create procedure empname(ssn1 IN number, fname1 OUT varchar2) is

```
2  fname2 varchar2(30);
3  begin
4      select fname into fname2 from employee where ssn=ssn1;
5      fname1:=fname2;
```

```
6 exception when no_data_found then
7   raise_application_error(-20100,'The given number is not present');
8 end;
9 /
```

Procedure created.

```
SQL> set serveroutput on;
```

```
SQL> declare
```

```
2 ssn2 number(5);
3 fname2 varchar2(30);
4 begin
5   ssn2:=&ssn2;
6 empname(ssn2,fname2);
7 dbms_output.put_line('Person name of ssn id '||ssn2||' is '||fname2);
8 end;
9 /
```

Enter value for ssn2: 1111

```
old 5:   ssn2:=&ssn2;
```

```
new 5:   ssn2:=1111;
```

Person name of ssn id 1111 is SMITH

PL/SQL procedure successfully completed.

```
SQL> /
```

Enter value for ssn2: 7777

```
old 5:   ssn2:=&ssn2;
```

```
new 5:   ssn2:=7777;
```

```
declare
```

```
*
```

ERROR at line 1:

ORA-20100: The given number is not present

ORA-06512: at "SYSTEM.EMPNAME", line 7

ORA-06512: at line 6