Expt. 8 5 November 2012

**Procedures in SQL**

**Aim:**

To study procedures in SQL.

**Theory:**

A procedure is an SQL block which performs one or more specific task. It is similar to procedures in other programming languages. A procedure has a header and a body. The header consists of the name of the procedure and the parameters or variables passed to the procedure. The body consists or declaration section, execution section and exception section similar to a general SQL block. A procedure may or may not return any value.

Parameters can be passed to procedures in three ways.

1. IN-parameters
2. OUT-parameters
3. IN OUT-parameters

General syntax to create a procedure is:

CREATE [OR REPLACE] PROCEDURE proc\_name [list of parameters]

IS

*Declaration section*

BEGIN

*Execution section*

EXCEPTION

*Exception section*

END;

The syntax within the brackets [ ] indicate they are optional. By using CREATE OR REPLACE together the procedure is created if no other procedure with the same name exists or the existing procedure is replaced with the current code.

There are two ways to execute a procedure.

1. From the SQL prompt.

EXECUTE [or EXEC] procedure\_name;

1. Within another procedure – simply use the procedure name.

procedure\_name;

**Queries:**

mysql> create database db5;

Query OK, 1 row affected (0.03 sec)

mysql> use db5;

Database changed

mysql> create table tab1(name varchar(20), addr varchar(20));

Query OK, 0 rows affected (0.08 sec)

mysql> insert into tab1 values('alice','margao');

Query OK, 1 row affected (0.03 sec)

mysql> insert into tab1 values('bob','mapusa');

Query OK, 1 row affected (0.00 sec)

mysql> insert into tab1 values('carl','panaji');

Query OK, 1 row affected (0.00 sec)

mysql> insert into tab1 values('dan','ponda');

Query OK, 1 row affected (0.00 sec)

mysql> select \* from tab1;

+-------+--------+

| name | addr |

+-------+--------+

| alice | margao |

| bob | mapusa |

| carl | panaji |

| dan | ponda |

+-------+--------+

4 rows in set (0.00 sec)

mysql> delimiter /

mysql> create procedure printtable()

-> begin

-> select \* from tab1;

-> end;

-> /

Query OK, 0 rows affected (0.05 sec)

mysql> call printtable()/

+-------+--------+

| name | addr |

+-------+--------+

| alice | margao |

| bob | mapusa |

| carl | panaji |

| dan | ponda |

+-------+--------+

4 rows in set (0.01 sec)

Query OK, 0 rows affected (0.16 sec)

mysql> create procedure printdataaddr(in address varchar(20))

-> begin

-> select \* from tab1 where addr=address;

-> end;

-> /

Query OK, 0 rows affected (0.00 sec)

mysql> call printdataaddr('margao');

-> /

+-------+--------+

| name | addr |

+-------+--------+

| alice | margao |

+-------+--------+

1 rows in set (0.00 sec)

Query OK, 0 rows affected (0.13 sec)

mysql> call printdataaddr('panjim')/

+-------+--------+

| name | addr |

+-------+--------+

| carl | panaji |

+-------+--------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.11 sec)

mysql> drop procedure printdataaddr;

-> /

Query OK, 0 rows affected (0.02 sec)

**Conclusion:**

Views in SQL were studied and given queries were solved.