

PROCEDURES IN ORACLE

```
create or replace PROCEDURE delete_contact (cid in INTEGER, result out string)
as
BEGIN
```

```
DELETE FROM contacts
WHERE
contact_id=cid;
result := SQL%rowcount;
dbms_output.put_line('There were a total of ' || result || ' rows updated');
END;
```

```
create or replace PROCEDURE insert_contact (cid in INTEGER, result out string)
as
```

```
BEGIN
```

```
INSERT INTO contacts(CONTACT_ID,FIRST_NAME, LAST_NAME, EMAIL)
VALUES (cid, 'NewData', 'NewLastname', 'newdatanewemail@senecacollege.ca');
result := SQL%rowcount;
dbms_output.put_line('There were a total of ' || result || ' rows inserted');

END;
```

```
create or replace PROCEDURE update_contact (cid in INTEGER, result out string)
as
```

```
BEGIN
UPDATE contacts
SET Email='newemail@senecacollege.ca'
WHERE
contact_id=cid;
result := SQL%rowcount;
dbms_output.put_line('There were a total of ' || result || ' rows updated');

END;
```

C++ TO CALL THE PL/SQL PROCEDURE

DBS311-ASSIGNMENT-EXAMPLE

```
int main(void) {
    Environment* env = nullptr;
    Connection* conn = nullptr;
    string str;

    string usr = ""; //this is your login assigned to you
    string pass = ""; //this is your password assigned to you

    string srv = "myoracle12c.senecacollege.ca:1521/oracle12c";

    try {
        env = Environment::createEnvironment(Environment::DEFAULT);
        conn = env->createConnection(usr, pass, srv);
        cout << "Database Connection is successful!" << endl;
        cout << "DBS311 ASSIGNMENT 1 AND 2" << endl;

        int input = 0;
        string email;
        Statement* stmt = conn->createStatement();
        stmt->setSQL("BEGIN print_contact_return(:1, :2); END;");
        stmt->setInt(1, 1);
        stmt->registerOutParam(2, Type::OCCISTRING, sizeof(email));
        // stmt->registerOutParam(1, Type::OCCISTRING, sizeof(email));
        stmt->executeUpdate();
        email = stmt->getString(2);
        cout << "Name and Email of contact : " << email;

    }

    catch (SQLException& sqlExcp) {
        cout << sqlExcp.getErrorCode() << ": " << sqlExcp.getMessage();
    }
    return 0;
}
```
