**SQL Functions**

You can write programs that are similar to traditional programming languages. There are different types of stored programs. Stored Functions can be executed by SQL statements.

After creating the function they appear in the functions folder. You can see info on the function by using properties on the function.

CREATE OR REPLACE FUNCTION fn\_add\_ints(int, int)

RETURNS int as

'

--$1 refers to 1st parameter and $2 the 2nd

--The result is passed back as a string

SELECT $1 + $2;

'

LANGUAGE SQL

Execute like this

SELECT fn\_add\_ints(4,5);

After creating the function they appear in the functions folder. You can see info on the function by using properties on the function.

**Dollar Quotes**

You are going to want to escape the quotes that surround your SQL so you can use quotes in your queries. $$ allows you to do this.

CREATE OR REPLACE FUNCTION fn\_add\_ints(int, int)

RETURNS int as

$body$

--$1 refers to 1st parameter and $2 the 2nd

SELECT $1 + $2;

$body$

LANGUAGE SQL

**Functions that Return Void**

Check if sales\_person has a state assigned and if not change it to ‘PA’

CREATE OR REPLACE FUNCTION fn\_update\_employee\_state()

RETURNS void as

$body$

UPDATE sales\_person

SET state = 'PA'

WHERE state is null

$body$

LANGUAGE SQL

SELECT fn\_update\_employee\_state();

**Get Maximum Product Price**

CREATE OR REPLACE FUNCTION fn\_max\_product\_price()

RETURNS numeric as

$body$

SELECT MAX(price)

FROM item

$body$

LANGUAGE SQL

SELECT fn\_max\_product\_price();

**Get Total Value of Inventory**

CREATE OR REPLACE FUNCTION fn\_get\_value\_inventory()

RETURNS numeric as

$body$

SELECT SUM(price)

FROM item;

$body$

LANGUAGE SQL

SELECT fn\_get\_value\_inventory();

**Get Number of Customers**

CREATE OR REPLACE FUNCTION fn\_number\_customers()

RETURNS numeric as

$body$

SELECT count(\*)

FROM customer;

$body$

LANGUAGE SQL

SELECT fn\_number\_customers();

**Get Number of Customers with No Phone**

CREATE OR REPLACE FUNCTION fn\_number\_customers\_no\_phone()

RETURNS numeric as

$body$

SELECT count(\*)

FROM customer

WHERE phone is NULL;

$body$

LANGUAGE SQL

SELECT fn\_number\_customers\_no\_phone();