Assignment 10

--1.Write a function to Calculate the total stock value for a given category:

(Stock value=ROUND(SUM(unit\_price \* units\_in\_stock)::DECIMAL, 2)

Return data type is DECIMAL(10,2)

CREATE OR REPLACE FUNCTION get\_total\_stock\_value(

p\_category\_name VARCHAR

)

RETURNS DECIMAL(10,2)

LANGUAGE plpgsql

AS $$

DECLARE

v\_stock\_value DECIMAL(10,2);

BEGIN

SELECT ROUND(SUM(p.unit\_price \* p.units\_in\_stock)::DECIMAL, 2)

INTO v\_stock\_value

FROM products p

JOIN categories c ON p.category\_id = c.category\_id

WHERE c.category\_name = p\_category\_name;

RETURN v\_stock\_value;

END;

$$;

SELECT \* FROM products;

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--2. Try writing a cursor query which I executed in the training.

CREATE OR REPLACE FUNCTION get\_total\_stock\_value\_cursor(

p\_category\_name VARCHAR

)

RETURNS DECIMAL(10,2)

LANGUAGE plpgsql

AS $$

DECLARE

v\_product\_id INT;

v\_unit\_price DECIMAL(10,2);

v\_units\_in\_stock INT;

v\_stock\_value DECIMAL(10,2) := 0;

v\_partial\_value DECIMAL(10,2);

product\_cursor CURSOR FOR

SELECT p.product\_id, p.unit\_price, p.units\_in\_stock

FROM products p

JOIN categories c ON p.category\_id = c.category\_id

WHERE c.category\_name = p\_category\_name;

BEGIN

OPEN product\_cursor;

LOOP

FETCH product\_cursor INTO v\_product\_id, v\_unit\_price, v\_units\_in\_stock;

EXIT WHEN NOT FOUND;

v\_partial\_value := ROUND(v\_unit\_price \* v\_units\_in\_stock, 2);

v\_stock\_value := v\_stock\_value + v\_partial\_value;

END LOOP;

CLOSE product\_cursor;

RETURN ROUND(v\_stock\_value, 2);

END;

$$;

SELECT \* FROM products;

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