

1-----

```
user_name VARCHAR(50) DEFAULT CURRENT_USER
);
```

Data Output	Messages	Notifications
CREATE TABLE		
Query returned successfully in 66 msec.		

2-----

```
28 OLD.product_name,  
29 OLD.unit_price,  
30 NEW.unit_price  
31 );  
32 RETURN NEW;  
33 END;  
34 $product_price_audit_trigger$ LANGUAGE plpgsql;  
35
```

Data Output	Messages	Notifications
CREATE FUNCTION		
Query returned successfully in 75 msec.		

3-----

FOR EACH ROW
EXECUTE FUNCTION product_price_audit_function();

```
37 --> Step 3: Create a row level trigger for the event below.
38 CREATE TRIGGER product_price_audit_trigger
39 AFTER UPDATE OF unit_price ON products
40 FOR EACH ROW
41 EXECUTE FUNCTION product_price_audit_function();
42
```

Data Output Messages Notifications

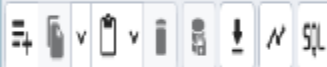
CREATE TRIGGER

Query returned successfully in 59 msec.

4-----

```
44 select * from products WHERE product_id = 1 ;
45
```

Data Output Messages Notifications



	product_id (FK) smallint	product_name character varying (40)	supplier_id smallint	category_id smallint	quantity_per_unit character varying (20)	unit_price real	units_in_stock smallint	units_on_order smallint	reorder_level smallint	discontinued integer
1	1	Chai	8	1	10 boxes x 30 bags	19.8	39	0	10	1

Check the audit table-----EMPTY table

select * from product_price_audit;

47	-- check the audit table
48	select * from product_price_audit;
49	
Data Output Messages Notifications	
SQL	
audit_id	product_id
[PK] integer	integer
product_name	old_price
character varying (40)	numeric (10,2)
new_price	change_date
numeric (10,2)	timestamp without time zone
user_name	
character varying (50)	

6-----

UPDATE products
SET unit_price = unit_price * 1.10
WHERE product_id = 1 ;

50	--Update the products table unit_price for product id =1
51	UPDATE products
52	SET unit_price = unit_price * 1.10
53	WHERE product_id = 1 ;
54	
55	
Data Output Messages Notifications	
UPDATE 1	
Query returned successfully in 78 msec.	

7-----

select * from products WHERE product_id = 1;

```

56 -- Now check the products table for update
57 select * from products WHERE product_id = 1 ;
58

```

Data Output Messages Notifications

	product_id [PK] smallint	product_name character varying (40)	supplier_id smallint	category_id smallint	quantity_per_unit character varying (20)	unit_price real	units_in_stock smallint	units_on_order smallint	reorder_level smallint	discontinued integer
1	1	Chai	8	1	10 boxes x 30 bags	21.779999	39	0	10	1

Now check the audit table also for updates

select * from product_price_audit;

```

60 -- Now check the audit table also for updates
61 select * from product_price_audit;
62

```

Data Output Messages Notifications

	audit_id [PK] integer	product_id integer	product_name character varying (40)	old_price numeric (10,2)	new_price numeric (10,2)	change_date timestamp without time zone	user_name character varying (50)
1	1	1	Chai	19.80	21.78	2025-05-03 07:59:25.320612	postgres

2. Create stored procedures using IN and INOUT parameters to assign tasks to employees

Step 1: Create table employee_tasks

```
69 7.21 create stored procedure using in and inout param
70 --> Step 1: Create table employee_tasks
71 CREATE TABLE IF NOT EXISTS employee_tasks (
72     task_id SERIAL PRIMARY KEY,
73     employee_id INT,
74     task_name VARCHAR(50),
75     assigned_date DATE DEFAULT CURRENT_DATE
76 );
77
78
79
```

Data Output	Messages	Notifications
CREATE TABLE		

Step 2-----

Step 2: Create a Stored Procedure

```
79 --> Step 2: Create a Stored Procedure
80
81 v CREATE OR REPLACE PROCEDURE assign_task (
82   IN p_employee_id INT,
83   IN p_task_name VARCHAR(50),
84   INOUT p_task_count INT DEFAULT 0
85 )
86 LANGUAGE plpgsql
87 AS $$
88 BEGIN
89   -- Step 1: Insert a new task for the employee
90   INSERT INTO employee_tasks (employee_id, task_name)
91     VALUES (p_employee_id, p_task_name);
92
93   -- Step 2: Count total tasks for the employee and assign to INOUT parameter
94   v SELECT COUNT(*) INTO p_task_count
95     FROM employee_tasks
96     WHERE employee_id = p_employee_id;
97
98   -- Step 3: Raise NOTICE message
99   v RAISE NOTICE 'Task "%" assigned to employee %. Total tasks: %',
100     p_task_name, p_employee_id, p_task_count;
101 END;
102 $$;
```

Data Output Messages Notifications

CREATE PROCEDURE

Query returned successfully in 94 msec.

Step3-----

Step 3: Call the Stored Procedure

CALL assign_task(1, 'Review Reports');

```
107 --> Step 3: Call the Stored Procedure
108 CALL assign_task(1, 'Review Reports');
109
```

Data Output Messages Notifications

	p_task_count	
	integer	
1		1

You should see the entry in employee_tasks table.

```
110 --> You should see the entry in employee_tasks table.
111 SELECT * FROM employee_tasks;
112
113
114
```

Data Output

Messages

Notifications

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SQL

	<div>task_id</div> <div>[PK] integer</div> <div>✎</div>	<div>employee_id</div> <div>integer</div> <div>✎</div>	<div>task_name</div> <div>character varying (50)</div> <div>✎</div>	<div>assigned_date</div> <div>date</div> <div>✎</div>
1	1	1	Review Reports	2025-05-03