**Q1) 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)\*/**

**Query:**

create or replace function calculate\_category\_stock(in categoryid int)

returns decimal(10,2)

language plpgsql

AS $$

declare

totalstock decimal(10,2);

Begin

if not exists ( select 1 from products where category\_id=categoryid) then

raise exception 'Category id % does not exists',categoryid;

return 0;

end if;

**-- Calculate the total stock by catgeory**

select ROUND(SUM(unit\_price \* units\_in\_stock)::DECIMAL, 2) into totalstock

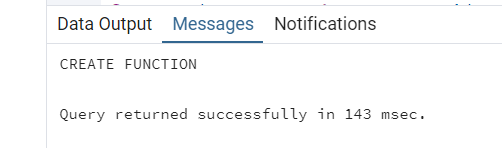
from products p where p.category\_id = categoryid;

return totalstock;

End;

$$;

**Output:**



**Query:**

SELECT category\_id, calculate\_category\_stock(category\_id) AS TotalStockValue FROM (

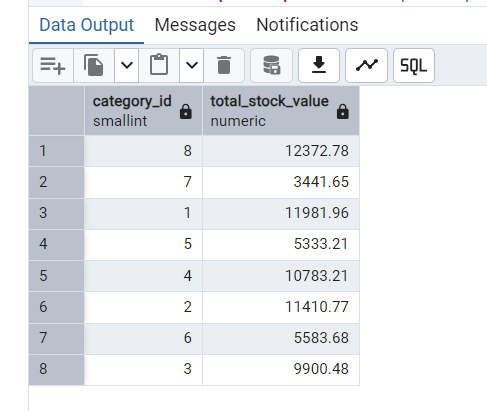
SELECT DISTINCT category\_id

FROM products

WHERE category\_id IS NOT NULL

) AS categories;

**Output:**



**Q2). Try writing a cursor query which I executed in the training.\*/**

**Query:**

create or replace procedure update\_prices\_with\_cursor()

language plpgsql

As $$

declare

product\_cursor cursor for

select product\_id,product\_name, unit\_price, units\_in\_stock

from products

where discontinued =0;

product\_record Record;

v\_new\_price decimal(10,2);

Begin

**--open the cursor**

open product\_cursor;

loop

**--Fetch the next row**

Fetch product\_cursor into product\_record;

exit when not found;

if product\_record.units\_in\_stock <10 then

v\_new\_price := product\_record.unit\_price \* 1.1;

else

v\_new\_price := product\_record.unit\_price \* 0.95;

end if;

**update products**

set unit\_price = round(v\_new\_price,2) where product\_id = product\_record.product\_id;

raise notice 'update % price from % to %',

product\_record.product\_name,

product\_record.unit\_price,

v\_new\_price;

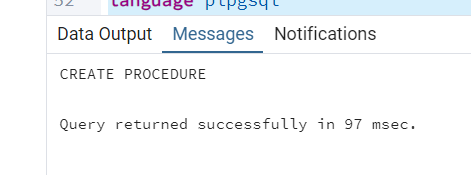
end loop;

close product\_cursor;

end;

$$;

**Output:**



call update\_prices\_with\_cursor();

**Output:**

