

```
-- Generar un listado de clientes e ítems que incluya un subquery dentro del select que muestre las últimas fechas de compra de cada uno de ellos
SELECT  vc.id_cliente ,
        vc.id_venta ,
        max(vc.fecha),
FROM ventas_cliente vc
GROUP BY vc.id_cliente , vc.id_venta
ORDER BY vc.id_cliente , vc.id_venta ;
```

ventas_cliente 1 X

SELECT vc.id_cliente , vc.id_venta , max(vc.fecha), min(vc.fecha) FROM ventas_cliente vc GRU Enter a SQL expression to filter results (use Ctrl+Space)

| | id_cliente | id_venta | max | min |
|----|------------|----------|------------|------------|
| 1 | 10 | 12 | 2023-09-02 | 2023-09-02 |
| 2 | 2 | 1 | 2023-08-30 | 2023-08-30 |
| 3 | 2 | 15 | 2023-08-20 | 2023-08-20 |
| 4 | 2 | 19 | 2023-05-02 | 2023-05-02 |
| 5 | 3 | 6 | 2023-06-14 | 2023-06-14 |
| 6 | 3 | 8 | 2022-09-27 | 2022-09-27 |
| 7 | 4 | 14 | 2022-02-11 | 2022-02-11 |
| 8 | 5 | 10 | 2022-04-14 | 2022-04-14 |
| 9 | 5 | 16 | 2023-09-18 | 2023-09-18 |
| 10 | 5 | 3 | 2023-11-03 | 2023-11-03 |
| 11 | 5 | 5 | 2023-01-18 | 2023-01-18 |
| 12 | 6 | 20 | 2023-02-09 | 2023-02-09 |
| 13 | 6 | 4 | 2022-09-01 | 2022-09-01 |
| 14 | 7 | 11 | 2023-12-03 | 2023-12-03 |
| 15 | 7 | 2 | 2022-03-26 | 2022-03-26 |
| 16 | 7 | 7 | 2023-08-30 | 2023-08-30 |
| 17 | 8 | 13 | 2022-10-17 | 2022-10-17 |
| 18 | 8 | 17 | 2022-12-11 | 2022-12-11 |
| 19 | 8 | 18 | 2023-04-11 | 2023-04-11 |
| 20 | 8 | 9 | 2023-10-09 | 2023-10-09 |


```

-- Construir una vista que muestre: Id Cliente, # de ventas por cliente
CREATE OR REPLACE VIEW v_cliente_num_ventas AS
SELECT  c.apellido_cliente ,
        c.nombre_cliente ,
        count(vc.id_venta)
FROM  ventas_cliente vc
INNER JOIN clientes c ON c.id_gobierno = vc.id_cliente
GROUP BY (c.apellido_cliente , c.nombre_cliente)
ORDER BY c.apellido_cliente , c.nombre_cliente ;

SELECT * FROM v_cliente_num_ventas;

```

v_cliente_num_ventas 1 ✕

SELECT * FROM v_cliente_num_ventas |  Enter a SQL expression to filter results (use Ctrl+Space)

| ABC apellido_cliente ▼ | ABC nombre_cliente ▼ | 123 count ▼ | |
|------------------------|----------------------|-------------|--|
| Appleseed | John | 4 | |
| Elizondo | Servando | 3 | |
| Guillen | Ana | 1 | |
| Lopez | Sebastian | 2 | |
| López | Monica | 2 | |
| Moreno | Joana | 4 | |
| Rodriguez | Juan | 3 | |
| Romo | Oscar | 1 | |

```
-- Construir una vista que detalle: Id Item, Descripción del item, # de Compras (Cantidad), Id Clientey Nombre del cliente
CREATE OR REPLACE VIEW v_item_ventas_por_cliente AS
SELECT  iv.id_item ,
        i.descripcion_item ,
        count(iv.id_venta) AS cantidad_vendida ,
        vc.id_cliente ,
        c.nombre_cliente || ' ' || c.apellido_cliente AS nombre_completo
FROM items_venta iv
INNER JOIN inventario i ON iv.id_item = i.id_item
INNER JOIN ventas_cliente vc ON iv.id_venta = vc.id_venta
INNER JOIN clientes c ON vc.id_cliente = c.id_gobierno
GROUP BY iv.id_item , i.descripcion_item , vc.id_cliente , nombre_completo
ORDER BY nombre_completo, iv.id_item ;

SELECT * FROM v_item_ventas_por_cliente;
```

m_ventas_por_cliente 1 X

CT* FROM v_item_ventas_por_cliente | Enter a SQL expression to filter results (use Ctrl+Space)

| ABC id_item | ABC descripcion_item | 123 cantidad_vendida | ABC id_cliente | ABC nombre_completo | |
|-------------|----------------------|----------------------|----------------|---------------------|--|
| 1 | Laptop Dell | 1 | 10 | Ana Guillen | |
| 2 | Mouse Logi | 1 | 10 | Ana Guillen | |
| 3 | Teclado Lulu | 1 | 10 | Ana Guillen | |
| 5 | Audifonos | 1 | 10 | Ana Guillen | |
| 1 | Laptop Dell | 2 | 5 | Joana Moreno | |
| 2 | Mouse Logi | 3 | 5 | Joana Moreno | |
| 3 | Teclado Lulu | 1 | 5 | Joana Moreno | |
| 4 | Mochila | 2 | 5 | Joana Moreno | |
| 5 | Audifonos | 4 | 5 | Joana Moreno | |
| 1 | Laptop Dell | 3 | 8 | John Appleseed | |
| 2 | Mouse Logi | 1 | 8 | John Appleseed | |
| 3 | Teclado Lulu | 3 | 8 | John Appleseed | |
| 4 | Mochila | 3 | 8 | John Appleseed | |
| 5 | Audifonos | 3 | 8 | John Appleseed | |
| 1 | Laptop Dell | 2 | 2 | Juan Rodriguez | |
| 2 | Mouse Logi | 3 | 2 | Juan Rodriguez | |
| 3 | Teclado Lulu | 2 | 2 | Juan Rodriguez | |
| 4 | Mochila | 1 | 2 | Juan Rodriguez | |
| 5 | Audifonos | 2 | 2 | Juan Rodriguez | |
| 1 | Laptop Dell | 1 | 6 | Monica López | |
| 3 | Teclado Lulu | 2 | 6 | Monica López | |
| 4 | Mochila | 2 | 6 | Monica López | |
| 5 | Audifonos | 2 | 6 | Monica López | |
| 1 | Laptop Dell | 1 | 4 | Oscar Romo | |
| 2 | Mouse Logi | 1 | 4 | Oscar Romo | |
| 4 | Mochila | 1 | 4 | Oscar Romo | |
| 1 | Laptop Dell | 2 | 3 | Sebastian Lopez | |
| 2 | Mouse Logi | 2 | 3 | Sebastian Lopez | |
| 3 | Teclado Lulu | 1 | 3 | Sebastian Lopez | |
| 5 | Audifonos | 1 | 3 | Sebastian Lopez | |
| 1 | Laptop Dell | 1 | 7 | Servando Elizondo | |
| 2 | Mouse Logi | 2 | 7 | Servando Elizondo | |
| 3 | Teclado Lulu | 3 | 7 | Servando Elizondo | |
| 4 | Mochila | 3 | 7 | Servando Elizondo | |
| 5 | Audifonos | 1 | 7 | Servando Elizondo | |

```
-- Construir una vista que muestre: Fecha (aaaa-mm-dd), Id Venta, Id Cliente, Total de venta
CREATE OR REPLACE VIEW v_venta_por_fecha AS
SELECT  vc.fecha ,
        vc.id_venta ,
        vc.id_cliente ,
        vc.total_venta
FROM  ventas_cliente vc
ORDER BY vc.id_cliente , vc.fecha

SELECT * FROM v_venta_por_fecha
```

v_venta_por_fecha 1 X

SELECT * FROM v_venta_por_fecha | Enter a SQL expression to filter results (use Ctrl+Space)

| | 🔒 fecha | ABC id_venta | ABC id_cliente | 123 total_venta | |
|----|------------|--------------|----------------|-----------------|--|
| 1 | 2023-09-02 | 12 | 10 | 47,600 | |
| 2 | 2023-05-02 | 19 | 2 | 70,900 | |
| 3 | 2023-08-20 | 15 | 2 | 17,300 | |
| 4 | 2023-08-30 | 1 | 2 | 85,400 | |
| 5 | 2022-09-27 | 8 | 3 | 107,500 | |
| 6 | 2023-06-14 | 6 | 3 | 63,000 | |
| 7 | 2022-02-11 | 14 | 4 | 33,300 | |
| 8 | 2022-04-14 | 10 | 5 | 11,600 | |
| 9 | 2023-01-18 | 5 | 5 | 84,000 | |
| 10 | 2023-09-18 | 16 | 5 | 12,300 | |
| 11 | 2023-11-03 | 3 | 5 | 70,700 | |
| 12 | 2022-09-01 | 4 | 6 | 120,000 | |
| 13 | 2023-02-09 | 20 | 6 | 13,400 | |
| 14 | 2022-03-26 | 2 | 7 | 102,200 | |
| 15 | 2023-08-30 | 7 | 7 | 18,500 | |
| 16 | 2023-12-03 | 11 | 7 | 10,700 | |
| 17 | 2022-10-17 | 13 | 8 | 84,500 | |
| 18 | 2022-12-11 | 17 | 8 | 28,000 | |
| 19 | 2023-04-11 | 18 | 8 | 69,300 | |
| 20 | 2023-10-09 | 9 | 8 | 31,100 | |
| | | | | | |

```
ALTER TABLE clientes
ADD ult_fecha_compra date,
ADD ult_item_compra varchar(20);
ADD CONSTRAINT fk_item_id FOREIGN KEY (ult_item_compra) REFERENCES inventario(id_item);
```

Statistics 1

| Name | Value |
|--------------|---|
| Updated Rows | 0 |
| Query | ALTER TABLE clientes ADD ult_fecha_compra date, ADD ult_item_compra varchar(20) |
| Start time | Sat Nov 04 19:03:02 CST 2023 |
| Finish time | Sat Nov 04 19:03:02 CST 2023 |

```
CREATE OR REPLACE FUNCTION SP_update_last_sale(client_id varchar(20),
                                                item_id varchar(20),
                                                fecha date)

RETURNS void AS
$BODY$
BEGIN
    UPDATE clientes c
    SET ult_fecha_compra = fecha , ult_item_compra = item_id
    WHERE id_gobierno = client_id;

END
$BODY$
LANGUAGE plpgsql;
```

Statistics 1 X

| Name | Value |
|--------------|--|
| Updated Rows | 0 |
| Query | CREATE OR REPLACE FUNCTION SP_update_last_sale(client_id varchar(20), item_id varchar(20), fecha date) RETURNS void AS \$BODY\$ BEGIN UPDATE clientes c SET ult_fecha_compra = fecha , ult_item_compra = item_id WHERE id_gobierno = client_id; END \$BODY\$ LANGUAGE plpgsql |
| Start time | Sat Nov 04 19:03:32 CST 2023 |
| Finish time | Sat Nov 04 19:03:32 CST 2023 |

```
SELECT * FROM clientes;
```


clientes 1 ✕

Enter a SQL expression to filter results (use Ctrl+Space)

-- Usar función

```
SELECT sp_update_last_sale('1', '1', '2023-04-11');
```



Results 1

SELECT sp_update_last_sale('1', '1', '2023-04-11')

Enter a SQL expression to filter results (use Ctrl+Space)

Grid



sp_update_last_sale



1

| | | | | | | | | | | | | | |
|---|-------------|----------------|------------------|------------------|-------------------|---------------------------|--------------|----------------|--------------------------|------------|------------------|-----------------|--|
| <div><div><div>-- Después de usar la función</div><div>SELECT * FROM clientes;</div></div><div></div></div> | | | | | | | | | | | | | |
| <div>clientes 1</div> <div>SELECT * FROM clientes Enter a SQL expression to filter results (use Ctrl+Space)</div> | | | | | | | | | | | | | |
| | id_gobierno | nombre_cliente | apellido_cliente | telefono_cliente | direccion_cliente | email_cliente | edad_cliente | genero_cliente | fecha_nacimiento_cliente | cp_cliente | ult_fecha_compra | ult_item_compra | |
| 2 | | Juan | Rodriguez | 123456789 | Direc2 | juanrdz1@gmail.com | 30 | H | 1999-02-25 | [NULL] | [NULL] | [NULL] | |
| 3 | | Sebastian | Lopez | 123456789 | Direc3 | seb_lopez@gmail.com | 23 | H | 2000-02-25 | [NULL] | [NULL] | [NULL] | |
| 4 | | Oscar | Romo | 123456789 | Direc4 | oromo@gmail.com | 40 | H | 1998-02-25 | [NULL] | [NULL] | [NULL] | |
| 5 | | Joana | Moreno | 123456789 | Direc5 | jmoreno@gmail.com | 26 | M | 1998-11-05 | [NULL] | [NULL] | [NULL] | |
| 6 | | Monica | López | 4491238400 | Colosio 12 | monica.lopez@outlook.com | 19 | M | 2002-04-04 | 20100 | [NULL] | [NULL] | |
| 7 | | Servando | Elizondo | 3940928373 | Garza Sada 1982 | servando.e@gmail.com | 23 | H | 2000-04-25 | 2940 | [NULL] | [NULL] | |
| 8 | | John | Appleseed | 1238475938 | Zaragoza 293 | japple@yahoo.com | 40 | H | 1983-03-29 | 12934 | [NULL] | [NULL] | |
| 9 | | Maria | Romo | 839492380 | 5 de mayo 234 | maria.romo@gmail.com | 23 | M | 2000-05-30 | 12988 | [NULL] | [NULL] | |
| 10 | | Ana | Guillen | 9278492381 | De la Rosa 293 | ana-g@gmail.com | 32 | M | 1991-02-20 | 94821 | [NULL] | [NULL] | |
| 1 | | Carlos | Del Valle | 123456789 | Direc1 | carlos.delvalle@gmail.com | 24 | H | 1999-02-25 | [NULL] | 2023-04-11 | 1 | |

```

-- Construir un Procedimiento Almacenado que genere un ranking de todos los ítems por ventas y # clientes
DROP FUNCTION sp_ranking_items;
CREATE OR REPLACE FUNCTION SP_ranking_items ()
RETURNS TABLE (id_item varchar, suma_precio float, num_clientes int)
AS $BODY$
    SELECT  iv.id_item ,
            sum(iv.precio) AS venta_total ,
            count(DISTINCT vc.id_cliente)
    FROM items_venta iv
    INNER JOIN ventas_cliente vc ON iv.id_venta = vc.id_venta
    GROUP BY iv.id_item
    ORDER BY venta_total DESC ;
$BODY$
LANGUAGE SQL ;

```

```
SELECT * FROM SP_ranking_items();
```

Results 1 X

SELECT * FROM SP_ranking_items() | Enter a SQL expression to filter results (use Ctrl+Space)

| | asc id_item | 123 suma_precio | 123 num_clientes |
|---|-------------|-----------------|------------------|
| 1 | 1 | 783,000 | 8 |
| 2 | 3 | 175,200 | 7 |
| 3 | 2 | 62,100 | 7 |
| 4 | 4 | 40,000 | 6 |
| 5 | 5 | 21,000 | 7 |
| | | | |
| | | | |