



Universidad Autónoma del Estado de Hidalgo
Instituto de Ciencias Básicas e Ingeniería
Área Académica de Computación

Licenciatura en Ciencias Computacionales

Práctica. Consultas a la BD de Distribuidora

MATERIA: Bases de Datos Distribuidas

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```
CREATE DATABASE herramientaDB;
USE herramientaDB;
CREATE TABLE supplier (
    idSupplier INT PRIMARY KEY,
    name VARCHAR(100),
    street VARCHAR(100),
    number INT,
    city VARCHAR(50),
    state VARCHAR(50),
    phone VARCHAR(20),
    email VARCHAR(100),
    contact VARCHAR(100)
);
```

```
CREATE TABLE purchase (
    idPurchase INT PRIMARY KEY,
    idSupplier INT,
    date DATE,
    time TIME,
    folio VARCHAR(50),
    payment VARCHAR(50),
    FOREIGN KEY (idSupplier) REFERENCES supplier(idSupplier)
);
```

```
CREATE TABLE tool (
    idTool INT PRIMARY KEY,
    name VARCHAR(100),
    model VARCHAR(50),
    manufacturer VARCHAR(50),
    color VARCHAR(20),
    size VARCHAR(20),
    description TEXT
);
```

```
CREATE TABLE warehouse (
    idWarehouse INT PRIMARY KEY,
    street VARCHAR(100),
    number INT,
    city VARCHAR(50),
    state VARCHAR(50),
    area VARCHAR(50),
    phone VARCHAR(20),
    manager VARCHAR(100)
);
```

```
CREATE TABLE inventory (
    idInventory INT PRIMARY KEY,
```

```

idWarehouse INT,
idTool INT,
zone VARCHAR(50),
rack INT,
level INT,
location VARCHAR(100),
amount INT,
purchasePrice DECIMAL(10, 2),
storeSalePrice DECIMAL(10, 2),
wholeSalePrice DECIMAL(10, 2),
FOREIGN KEY (idWarehouse) REFERENCES warehouse(idWarehouse),
FOREIGN KEY (idTool) REFERENCES tool(idTool)
);

```

```

CREATE TABLE buyTool (
idBuyTool INT PRIMARY KEY,
idPurchase INT,
idInventory INT,
amount INT,
unitPrice DECIMAL(10, 2),
note TEXT,
FOREIGN KEY (idPurchase) REFERENCES purchase(idPurchase),
FOREIGN KEY (idInventory) REFERENCES inventory(idInventory)
);

```

```

INSERT INTO supplier (idSupplier, name, street, number, city, state, phone, email,
contact) VALUES
(1, 'Supplier A', 'Street A', 1, 'City A', 'State A', '123456789', 'supplierA@example.com',
'Contact A'),
(2, 'Supplier B', 'Street B', 2, 'City B', 'State B', '987654321', 'supplierB@example.com',
'Contact B'),
(3, 'Supplier C', 'Street C', 3, 'City C', 'State C', '456789123', 'supplierC@example.com',
'Contact C'),
(4, 'Supplier D', 'Street D', 4, 'City D', 'State D', '789123456', 'supplierD@example.com',
'Contact D'),
(5, 'Supplier E', 'Street E', 5, 'City E', 'State E', '321654987', 'supplierE@example.com',
'Contact E');

```

```

INSERT INTO tool (idTool, name, model, manufacturer, color, size, description) VALUES
(1, 'Hammer', 'H100', 'BrandX', 'Red', 'Medium', 'Heavy-duty hammer for construction'),
(2, 'Screwdriver', 'S200', 'BrandY', 'Blue', 'Small', 'Precision screwdriver for electronics'),
(3, 'Wrench', 'W300', 'BrandZ', 'Black', 'Large', 'Adjustable wrench for plumbing'),
(4, 'Pliers', 'P400', 'BrandA', 'Yellow', 'Medium', 'Multi-purpose pliers for various tasks'),
(5, 'Drill', 'D500', 'BrandB', 'Green', 'Medium', 'Cordless drill for home improvement');

```

```
INSERT INTO warehouse (idWarehouse, street, number, city, state, area, phone, manager)
VALUES
```

```
(1, 'Warehouse Street 1', 10, 'Warehouse City A', 'Warehouse State A', 'North', '555-1234',
'Manager A'),
(2, 'Warehouse Street 2', 20, 'Warehouse City B', 'Warehouse State B', 'South', '555-5678',
'Manager B'),
(3, 'Warehouse Street 3', 30, 'Warehouse City C', 'Warehouse State C', 'East', '555-9876',
'Manager C'),
(4, 'Warehouse Street 4', 40, 'Warehouse City D', 'Warehouse State D', 'West', '555-5432',
'Manager D'),
(5, 'Warehouse Street 5', 50, 'Warehouse City E', 'Warehouse State E', 'Central', '555-6789',
'Manager E');
```

```
INSERT INTO purchase (idPurchase, idSupplier, date, time, folio, payment) VALUES
```

```
(1, 1, '2023-01-10', '10:00:00', 'F1234', 'Credit'),
(2, 2, '2023-01-11', '11:00:00', 'F1235', 'Cash'),
(3, 3, '2023-01-12', '12:00:00', 'F1236', 'Credit'),
(4, 4, '2023-01-13', '13:00:00', 'F1237', 'Debit'),
(5, 5, '2023-01-14', '14:00:00', 'F1238', 'Credit'),
(6, 1, '2023-01-15', '15:00:00', 'F1239', 'Cash'),
(7, 2, '2023-01-16', '16:00:00', 'F1240', 'Debit'),
(8, 3, '2023-01-17', '17:00:00', 'F1241', 'Credit'),
(9, 4, '2023-01-18', '18:00:00', 'F1242', 'Cash'),
(10, 5, '2023-01-19', '19:00:00', 'F1243', 'Debit');
```

```
INSERT INTO inventory (idInventory, idWarehouse, idTool, zone, rack, level, location,
amount, purchasePrice, storeSalePrice, wholeSalePrice) VALUES
```

```
(1, 1, 1, 'Zone A', 1, 1, 'Loc1', 50, 100.00, 150.00, 130.00),
(2, 1, 2, 'Zone A', 1, 2, 'Loc2', 40, 50.00, 75.00, 60.00),
(3, 1, 3, 'Zone A', 1, 3, 'Loc3', 30, 200.00, 300.00, 250.00),
(4, 1, 4, 'Zone A', 2, 1, 'Loc4', 20, 75.00, 100.00, 85.00),
(5, 1, 5, 'Zone A', 2, 2, 'Loc5', 10, 150.00, 200.00, 180.00),
(6, 2, 1, 'Zone B', 2, 3, 'Loc6', 60, 100.00, 150.00, 130.00),
(7, 2, 2, 'Zone B', 3, 1, 'Loc7', 50, 50.00, 75.00, 60.00),
(8, 2, 3, 'Zone B', 3, 2, 'Loc8', 40, 200.00, 300.00, 250.00),
(9, 2, 4, 'Zone B', 3, 3, 'Loc9', 30, 75.00, 100.00, 85.00),
(10, 2, 5, 'Zone B', 1, 1, 'Loc10', 20, 150.00, 200.00, 180.00),
(11, 3, 1, 'Zone C', 1, 2, 'Loc11', 70, 100.00, 150.00, 130.00),
(12, 3, 2, 'Zone C', 1, 3, 'Loc12', 60, 50.00, 75.00, 60.00),
(13, 3, 3, 'Zone C', 2, 1, 'Loc13', 50, 200.00, 300.00, 250.00),
(14, 3, 4, 'Zone C', 2, 2, 'Loc14', 40, 75.00, 100.00, 85.00);
```

Diseñar las sentencias de álgebra relacional y sentencias SQL para las siguientes consultas:

- Reporte de compras del mes de enero que incluya el nombre del proveedor, el nombre de la herramienta, cantidad, precio unitario y precio total

π nombre_proveedor, nombre_herramienta, cantidad, precio_unitario, (cantidad * precio_unitario) \rightarrow precio_total
 σ fecha_compra \geq '2023 - 01 - 01' AND fecha_compra $<$ '2023 - 01 - 31' (Compra \bowtie Proveedor \bowtie Herramienta)
SELECT s.name AS nombre_proveedor, t.name AS nombre_herramienta, bt.amount, bt.unitPrice AS precio_unitario, (bt.amount * bt.unitPrice) AS precio_total
FROM purchase p
JOIN supplier s ON p.idSupplier = s.idSupplier
JOIN buyTool bt ON p.idPurchase = bt.idPurchase
JOIN inventory i ON bt.idInventory = i.idInventory
JOIN tool t ON i.idTool = t.idTool
WHERE p.date BETWEEN '2023-01-01' AND '2023-01-31';

- Reporte de inventario de la bodega de la calle 13 que incluya el nombre de la herramienta, cantidad y costo total (precio de compra * cantidad)

π nombre_herramienta, cantidad, (precio_compra * cantidad) \rightarrow costo_total
 σ calle = 'Calle 13' (Inventario \bowtie Herramienta \bowtie Bodega)
SELECT t.name AS nombre_herramienta, i.amount, (i.purchasePrice * i.amount) AS costo_total
FROM inventory i
JOIN tool t ON i.idTool = t.idTool
JOIN warehouse w ON i.idWarehouse = w.idWarehouse
WHERE w.street = 'Calle 13';

- Reporte de compras de la herramienta “Tijera de jardinero” durante el año 2023 el nombre del proveedor, fecha de compra, cantidad, precio unitario y costo total

π nombre_proveedor, fecha_compra, cantidad, precio_unitario, (cantidad * precio_unitario) \rightarrow costo_total
 σ nombre_herramienta = 'Tijera de jardinero' AND fecha_compra $>$ '2023 - 01 - 01' AND fecha_compra $<$ '2023 - 12 - 31' (Compra \bowtie Proveedor \bowtie Herramienta)
SELECT s.name AS nombre_proveedor, p.date AS fecha_compra, bt.amount, bt.unitPrice AS precio_unitario, (bt.amount * bt.unitPrice) AS costo_total
FROM purchase p
JOIN supplier s ON p.idSupplier = s.idSupplier
JOIN buyTool bt ON p.idPurchase = bt.idPurchase
JOIN inventory i ON bt.idInventory = i.idInventory
JOIN tool t ON i.idTool = t.idTool
WHERE t.name = 'Tijera de jardinero' AND p.date BETWEEN '2023-01-01' AND '2023-12-31';

- Listado de responsables de las bodegas de la empresa con calle, número y teléfono

$\pi \text{ manager, street, number, phone (Bodega)}$

SELECT manager, street, number, phone

FROM warehouse;

- Listado de contactos con los proveedores con nombre de contacto, nombre de proveedor, teléfono y correo electrónico

$\pi \text{ contact, name, phone, email (Proveedor)}$

SELECT contact AS nombre_contacto, name AS nombre_proveedor, phone, email

FROM supplier;

- Reporte de herramientas compradas cuyo precio unitario se menor o igual a \$250.00 que incluya nombre de la herramienta, fecha de compra y cantidad comprada en orden cronológico descendiente.

$\pi \text{ nombre_herramienta, fecha_compra, cantidad}$

$\sigma \text{ precio_unitario} \leq 250 \text{ (Compra} \bowtie \text{Herramienta)}$

$\rho \text{ temporal} (\pi \text{ nombre_herramienta, fecha_compra, cantidad})$

$\tau \text{ fecha_compra DESC (temporal)}$

SELECT t.name AS nombre_herramienta, p.date AS fecha_compra, bt.amount

FROM purchase p

JOIN buyTool bt ON p.idPurchase = bt.idPurchase

JOIN inventory i ON bt.idInventory = i.idInventory

JOIN tool t ON i.idTool = t.idTool

WHERE bt.unitPrice <= 250

ORDER BY p.date DESC;

- Reporte de herramientas en el inventario cuyo stock sea entre 5 y 20 piezas que incluya calle y número de la bodega, nombre de la herramienta, ubicación y cantidad en existencia

$\pi \text{ street, number, name, location, amount}$

$\sigma \text{ amount} \geq 5 \text{ AND amount} \leq 20 \text{ (Inventario} \bowtie \text{Herramienta} \bowtie \text{Bodega)}$

SELECT w.street, w.number, t.name AS nombre_herramienta, i.location, i.amount

FROM inventory i

JOIN tool t ON i.idTool = t.idTool

JOIN warehouse w ON i.idWarehouse = w.idWarehouse

WHERE i.amount BETWEEN 5 AND 20;

- Reporte del stock de todas las bodegas que incluya calle, número, responsable, teléfono y total de herramientas almacenadas

$\pi \text{ street, number, manager, phone, SUM(amount)} \rightarrow \text{total_herramientas}$

$(\text{Inventory} \bowtie \text{Warehouse}) \text{ GROUP BY street, number, manager, phone}$

SELECT w.street, w.number, w.manager, w.phone, SUM(i.amount) AS total_herramientas

FROM inventory i

JOIN warehouse w ON i.idWarehouse = w.idWarehouse

GROUP BY w.street, w.number, w.manager, w.phone;

- Reporte de valor de inventario de todas las bodegas que incluya calle, estado y monto total de precio de venta de las herramientas almacenadas

```

π street, state, SUM(storeSalePrice * amount) -> monto_total
(Inventory ⋈ Warehouse) GROUP BY street, state
SELECT w.street, w.state, SUM(i.storeSalePrice * i.amount) AS monto_total
FROM inventory i
JOIN warehouse w ON i.idWarehouse = w.idWarehouse
GROUP BY w.street, w.state;

```

```

mysql> CREATE DATABASE herramientaDB;USE herramientaDB;
Query OK, 1 row affected (0.01 sec)

Database changed
mysql> CREATE TABLE supplier ( idSupplier INT PRIMARY KEY, name VARCHAR(100), street VARCHAR(100), number INT,
city VARCHAR(50), state VARCHAR(50), phone VARCHAR(20), email VARCHAR(100), contact VARCHAR(100));CREA
TE TABLE purchase ( idPurchase INT PRIMARY KEY, idSupplier INT, date DATE, time TIME, folio VARCHAR(50),
payment VARCHAR(50), FOREIGN KEY (idSupplier) REFERENCES supplier(idSupplier));CREATE TABLE tool ( idTool INT P
RIMARY KEY, name VARCHAR(100), model VARCHAR(50), manufacturer VARCHAR(50), color VARCHAR(20), size VARCH
AR(20), description TEXT);CREATE TABLE warehouse ( idwarehouse INT PRIMARY KEY, street VARCHAR(100), number
INT, city VARCHAR(50), state VARCHAR(50), area VARCHAR(50), phone VARCHAR(20), manager VARCHAR(100));CREA
TE TABLE inventory ( idInventory INT PRIMARY KEY, idwarehouse INT, idTool INT, zone VARCHAR(50), rack INT
2), level INT, location VARCHAR(100), amount INT, purchasePrice DECIMAL(10, 2), storeSalePrice DECIMAL(10,
2), wholeSalePrice DECIMAL(10, 2), FOREIGN KEY (idwarehouse) REFERENCES warehouse(idwarehouse), FOREIGN KEY (id
Tool) REFERENCES tool(idTool));CREATE TABLE buyTool ( idBuyTool INT PRIMARY KEY, idPurchase INT, idInventory IN
T, amount INT, unitPrice DECIMAL(10, 2), note TEXT, FOREIGN KEY (idPurchase) REFERENCES purchase(idPurchase)
, FOREIGN KEY (idInventory) REFERENCES inventory(idInventory));
Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.03 sec)

Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.03 sec)

Query OK, 0 rows affected (0.03 sec)

mysql> CREATE DATABASE herramientaDB;USE herramientaDB;
Query OK, 1 row affected (0.01 sec)

Database changed
mysql> CREATE TABLE supplier ( idSupplier INT PRIMARY KEY, name VARCHAR(100), street VARCHAR(100), number INT,
city VARCHAR(50), state VARCHAR(50), phone VARCHAR(20), email VARCHAR(100), contact VARCHAR(100));CREA
TE TABLE purchase ( idPurchase INT PRIMARY KEY, idSupplier INT, date DATE, time TIME, folio VARCHAR(50),
payment VARCHAR(50), FOREIGN KEY (idSupplier) REFERENCES supplier(idSupplier));CREATE TABLE tool ( idTool INT P
RIMARY KEY, name VARCHAR(100), model VARCHAR(50), manufacturer VARCHAR(50), color VARCHAR(20), size VARCH
AR(20), description TEXT);CREATE TABLE warehouse ( idwarehouse INT PRIMARY KEY, street VARCHAR(100), number
INT, city VARCHAR(50), state VARCHAR(50), area VARCHAR(50), phone VARCHAR(20), manager VARCHAR(100));CREA
TE TABLE inventory ( idInventory INT PRIMARY KEY, idwarehouse INT, idTool INT, zone VARCHAR(50), rack INT
2), level INT, location VARCHAR(100), amount INT, purchasePrice DECIMAL(10, 2), storeSalePrice DECIMAL(10,
2), wholeSalePrice DECIMAL(10, 2), FOREIGN KEY (idwarehouse) REFERENCES warehouse(idwarehouse), FOREIGN KEY (id
Tool) REFERENCES tool(idTool));CREATE TABLE buyTool ( idBuyTool INT PRIMARY KEY, idPurchase INT, idInventory IN
T, amount INT, unitPrice DECIMAL(10, 2), note TEXT, FOREIGN KEY (idPurchase) REFERENCES purchase(idPurchase)
, FOREIGN KEY (idInventory) REFERENCES inventory(idInventory));
Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.03 sec)

Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.03 sec)

Query OK, 0 rows affected (0.03 sec)

```



```
mysql> INSERT INTO supplier (idSupplier, name, street, number, city, state, phone, email, contact) VALUES(1, 'Supplier A', 'Street A', 1, 'City A', 'State A', '123456789', 'supplierA@example.com', 'Contact A'),(2, 'Supplier B', 'Street B', 2, 'City B', 'State B', '987654321', 'supplierB@example.com', 'Contact B'),(3, 'Supplier C', 'Street C', 3, 'City C', 'State C', '456789123', 'supplierC@example.com', 'Contact C'),(4, 'Supplier D', 'Street D', 4, 'City D', 'State D', '789123456', 'supplierD@example.com', 'Contact D'),(5, 'Supplier E', 'Street E', 5, 'City E', 'State E', '321654987', 'supplierE@example.com', 'Contact E');
Query OK, 5 rows affected (0.01 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> INSERT INTO tool (idTool, name, model, manufacturer, color, size, description) VALUES(1, 'Hammer', 'H100', 'Brand X', 'Red', 'Medium', 'Heavy-duty hammer for construction'),(2, 'Screwdriver', 'S200', 'Brandy', 'Blue', 'Small', 'Precision screwdriver for electronics'),(3, 'Wrench', 'W300', 'BrandZ', 'Black', 'Large', 'Adjustable wrench for plumbing'),(4, 'Pliers', 'P400', 'BrandA', 'Yellow', 'Medium', 'Multi-purpose pliers for various tasks'),(5, 'Drill', 'D500', 'BrandB', 'Green', 'Medium', 'Cordless drill for home improvement');
Query OK, 5 rows affected (0.00 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> INSERT INTO warehouse (idWarehouse, street, number, city, state, area, phone, manager) VALUES(1, 'Warehouse Street 1', 10, 'Warehouse City A', 'Warehouse State A', 'North', '555-1234', 'Manager A'),(2, 'Warehouse Street 2', 20, 'Warehouse City B', 'Warehouse State B', 'South', '555-5678', 'Manager B'),(3, 'Warehouse Street 3', 30, 'Warehouse City C', 'Warehouse State C', 'East', '555-9876', 'Manager C'),(4, 'Warehouse Street 4', 40, 'Warehouse City D', 'Warehouse State D', 'West', '555-5432', 'Manager D'),(5, 'Warehouse Street 5', 50, 'Warehouse City E', 'Warehouse State E', 'Central', '555-6789', 'Manager E');
Query OK, 5 rows affected (0.00 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> INSERT INTO purchase (idPurchase, idSupplier, date, time, folio, payment) VALUES(1, 1, '2023-01-10', '10:00:00', 'F1234', 'Credit'),(2, 2, '2023-01-11', '11:00:00', 'F1235', 'Cash'),(3, 3, '2023-01-12', '12:00:00', 'F1236', 'Credit'),(4, 4, '2023-01-13', '13:00:00', 'F1237', 'Debit'),(5, 5, '2023-01-14', '14:00:00', 'F1238', 'Credit'),(6, 1, '2023-01-15', '15:00:00', 'F1239', 'Cash'),(7, 2, '2023-01-16', '16:00:00', 'F1240', 'Debit'),(8, 3, '2023-01-17', '17:00:00', 'F1241', 'Credit'),(9, 4, '2023-01-18', '18:00:00', 'F1242', 'Cash'),(10, 5, '2023-01-19', '19:00:00', 'F1243', 'Debit');
Query OK, 10 rows affected (0.00 sec)
Records: 10 Duplicates: 0 Warnings: 0

mysql> INSERT INTO inventory (idInventory, idWarehouse, idTool, zone, rack, level, location, amount, purchasePrice, storeSalePrice, wholesalePrice) VALUES(1, 1, 1, 'Zone A', 1, 1, 'Loc1', 50, 100.00, 150.00, 130.00),(2, 1, 2, 'Zone A', 1, 2, 'Loc2', 40, 50.00, 75.00, 60.00),(3, 1, 3, 'Zone A', 1, 3, 'Loc3', 30, 200.00, 300.00, 250.00),(4, 1, 4, 'Zone A', 1, 4, 'Loc4', 20, 75.00, 100.00, 85.00),(5, 1, 5, 'Zone A', 1, 5, 'Loc5', 10, 150.00, 200.00, 180.00),(6, 2, 1, 'Zone B', 2, 1, 'Loc6', 60, 100.00, 150.00, 130.00),(7, 2, 2, 'Zone B', 2, 2, 'Loc7', 50, 50.00, 75.00, 60.00),(8, 2, 3, 'Zone B', 2, 3, 'Loc8', 40, 200.00, 300.00, 250.00),(9, 2, 4, 'Zone B', 2, 4, 'Loc9', 30, 75.00, 100.00, 85.00),(10, 2, 5, 'Zone B', 2, 5, 'Loc10', 20, 150.00, 200.00, 180.00),(11, 3, 1, 'Zone C', 3, 1, 'Loc11', 70, 100.00, 150.00, 130.00),(12, 3, 2, 'Zone C', 3, 2, 'Loc12', 60, 50.00, 75.00, 60.00),(13, 3, 3, 'Zone C', 3, 3, 'Loc13', 50, 200.00, 300.00, 250.00),(14, 3, 4, 'Zone C', 3, 4, 'Loc14', 40, 75.00, 100.00, 85.00);
Query OK, 14 rows affected (0.00 sec)
Records: 14 Duplicates: 0 Warnings: 0

mysql> SELECT w.street, w.number, w.manager, w.phone
-> FROM warehouse w;
+-----+-----+-----+-----+
| street | number | manager | phone |
+-----+-----+-----+-----+
| Warehouse Street 1 | 10 | Manager A | 555-1234 |
| Warehouse Street 2 | 20 | Manager B | 555-5678 |
| Warehouse Street 3 | 30 | Manager C | 555-9876 |
| Warehouse Street 4 | 40 | Manager D | 555-5432 |
| Warehouse Street 5 | 50 | Manager E | 555-6789 |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT s.contact, s.name, s.phone, s.email
-> FROM supplier s;
+-----+-----+-----+-----+
| contact | name | phone | email |
+-----+-----+-----+-----+
| Contact A | Supplier A | 123456789 | supplierA@example.com |
| Contact B | Supplier B | 987654321 | supplierB@example.com |
| Contact C | Supplier C | 456789123 | supplierC@example.com |
| Contact D | Supplier D | 789123456 | supplierD@example.com |
| Contact E | Supplier E | 321654987 | supplierE@example.com |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```



```
mysql> SELECT w.street, w.number, t.name AS tool_name, i.location, i.amount
-> FROM inventory i
-> JOIN warehouse w ON i.idWarehouse = w.idWarehouse
-> JOIN tool t ON i.idTool = t.idTool
-> WHERE i.amount BETWEEN 5 AND 20;
```

street	number	tool_name	location	amount
Warehouse Street 1	10	Pliers	Loc4	20
Warehouse Street 1	10	Drill	Loc5	10
Warehouse Street 2	20	Drill	Loc10	20

3 rows in set (0.00 sec)

```
mysql> SELECT w.street, w.number, w.manager, w.phone, SUM(i.amount) AS total_tools
-> FROM warehouse w
-> JOIN inventory i ON w.idWarehouse = i.idWarehouse
-> GROUP BY w.street, w.number, w.manager, w.phone;
```

street	number	manager	phone	total_tools
Warehouse Street 1	10	Manager A	555-1234	150
Warehouse Street 2	20	Manager B	555-5678	200
Warehouse Street 3	30	Manager C	555-9876	220

3 rows in set (0.00 sec)

```
mysql> SELECT w.street, w.state, SUM(i.storeSalePrice * i.amount) AS total_inventory_value
-> FROM warehouse w
-> JOIN inventory i ON w.idWarehouse = i.idWarehouse
-> GROUP BY w.street, w.state;
```

street	state	total_inventory_value
Warehouse Street 1	Warehouse State A	23500.00
Warehouse Street 2	Warehouse State B	31750.00
Warehouse Street 3	Warehouse State C	34000.00

3 rows in set (0.00 sec)

```
-> JOIN supplier s ON p.idSupplier = s.idSupplier
-> JOIN inventory i ON bt.idInventory = i.idInventory
-> JOIN tool t ON i.idTool = t.idTool
-> WHERE MONTH(p.date) = 1;
Empty set (0.00 sec)
```

```
mysql> SELECT t.name AS tool_name, i.amount, (i.amount * i.purchasePrice) AS total_cost
-> FROM inventory i
-> JOIN warehouse w ON i.idWarehouse = w.idWarehouse
-> JOIN tool t ON i.idTool = t.idTool
-> WHERE w.street = 'Calle 13';
Empty set (0.00 sec)
```

```
mysql> SELECT s.name AS supplier_name, p.date, bt.amount, bt.unitPrice, (bt.amount * bt.unitPrice) AS total_cost
-> FROM buyTool bt
-> JOIN purchase p ON bt.idPurchase = p.idPurchase
-> JOIN supplier s ON p.idSupplier = s.idSupplier
-> JOIN inventory i ON bt.idInventory = i.idInventory
-> JOIN tool t ON i.idTool = t.idTool
-> WHERE t.name = 'Tijera de jardinero' AND YEAR(p.date) = 2023;
Empty set (0.00 sec)
```

```
mysql> SELECT w.street, w.number, w.manager, w.phone
-> FROM warehouse w;
```

street	number	manager	phone
Warehouse Street 1	10	Manager A	555-1234
Warehouse Street 2	20	Manager B	555-5678
Warehouse Street 3	30	Manager C	555-9876
Warehouse Street 4	40	Manager D	555-5432
Warehouse Street 5	50	Manager E	555-6789

5 rows in set (0.00 sec)

```
mysql> SELECT s.contact, s.name, s.phone, s.email
-> FROM supplier s;
```

contact	name	phone	email
Contact A	Supplier A	123456789	supplierA@example.com
Contact B	Supplier B	987654321	supplierB@example.com
Contact C	Supplier C	456789123	supplierC@example.com
Contact D	Supplier D	789123456	supplierD@example.com
Contact E	Supplier E	321654987	supplierE@example.com

5 rows in set (0.00 sec)

```
mysql> SELECT t.name AS tool_name, p.date, bt.amount
-> FROM buyTool bt
-> JOIN purchase p ON bt.idPurchase = p.idPurchase
-> JOIN inventory i ON bt.idInventory = i.idInventory
-> JOIN tool t ON i.idTool = t.idTool
-> WHERE bt.unitPrice <= 250.00
-> ORDER BY p.date DESC;
Empty set (0.00 sec)
```