

```
CREATE DATABASE Gasolinera;
USE Gasolinera;
```

```
CREATE TABLE Cliente (
  id_cliente INT AUTO-INCREMENT PRIMARY KEY,
  nombre VARCHAR(100),
  cedula VARCHAR(20),
  telefono VARCHAR(20)
);
```

```
CREATE TABLE Empleado (
  id_empleado INT AUTO-INCREMENT PRIMARY KEY,
  nombre VARCHAR(100),
  cargo VARCHAR(50),
  telefono VARCHAR(20)
);
```

```
CREATE TABLE Combustible (
  id_combustible INT AUTO-INCREMENT PRIMARY KEY,
  tipo VARCHAR(50),
  precio DECIMAL(10,2),
  cantidad INT
);
```

```
CREATE TABLE Turno (
  id_turno INT AUTO-INCREMENT PRIMARY KEY,
  dia VARCHAR(20),
  hora_inicio TIME,
  hora_fin TIME,
);
```

```
CREATE TABLE Venta (
  id_venta INT AUTO-INCREMENT PRIMARY KEY,
  fecha DATE,
  total DECIMAL(10,2),
  id_combustible INT,
  FOREIGN KEY (id_combustible) REFERENCES
  Combustible (id_combustible)
);
```

```
CREATE TABLE Venta_Cliente (
  id_cliente INT,
  id_venta INT,
  PRIMARY KEY (id_cliente, id_venta),
  FOREIGN KEY (id_cliente) REFERENCES Cliente (id_cliente),
  FOREIGN KEY (id_venta) REFERENCES Venta (id_venta)
);
```

```

CREATE Empleado_Turno (
  id_empleado INT,
  id_turno INT,
  PRIMARY KEY (id_empleado, id_turno),
  FOREIGN KEY (id_empleado) REFERENCES Empleado
(id_empleado),
  FOREIGN KEY (id_turno) REFERENCES Turno (id_turno)
);

```

```

INSERT INTO cliente (nombre, cedula, telefono) VALUES
('Laura Gomez', '12345678', '3101234567'),
('Shoan Penagos', '87654321', '3114654321'),
('Ana Torres', '11223344', '3129988776');

```

```

INSERT INTO Empleado (nombre, cargo, telefono) VALUES
('Luis Mojica', 'Cajero', '3101112233'),
('Carla Mendoza', 'Supervisor', '3112223344'),
('Davier Mora', 'Atendedor', '3123334455');

```

```

INSERT INTO Combustible (tipo, precio, cantidad) VALUES
('Gasolina Corriente', 9500.00, 10000),
('Gasolina Extra', 11000.00, 5000),
('Diesel', 8400.00, 1000);

```

```

INSERT INTO Turno (dia, hora_inicio, hora_fin) VALUES
('Lunes', '06:00:00', '14:00:00'),
('Martes', '14:00:00', '22:00:00'),
('Miercoles', '22:00:00', '06:00:00');

```

```

INSERT INTO venta (fecha, total, id_combustible) VALUES
('2025-06-01', 50000.00, 1),
('2025-06-02', 30000.00, 2),
('2025-06-03', 20000.00, 3);

```

```

INSERT INTO venta_cliente (id_cliente, id_venta) VALUES
(1, 1),
(2, 2),
(3, 3);

```

```

INSERT INTO Empleado_Turno (id_empleado, id_turno) VALUES
(1, 1),
(2, 2),
(3, 3);

```



```
UPDATE Combustible SET precio = 9800.00  
WHERE id_combustible = 1;
```

```
UPDATE cliente SET telefono = '3133334444'  
WHERE id_cliente = 2;
```

```
UPDATE empleado SET cargo = 'Gerente'  
WHERE id_empleado = 2;
```

```
UPDATE Turno SET dia = 'Jueves' WHERE id_turno = 2;
```

```
UPDATE Venta SET total = 55000.00 WHERE id_venta = 1;
```

```
DELETE FROM venta_cliente  
WHERE id_cliente = 3 AND id_venta = 3;
```

```
DELETE FROM empleado_turno WHERE id_empleado = 3  
AND id_turno = 3;
```

```
DELETE FROM venta WHERE id_venta = 3;
```

```
DELETE FROM empleado WHERE id_empleado = 3;
```

```
DELETE FROM cliente WHERE id_cliente = 3;
```

```
SELECT cl.nombre AS cliente, v.fecha, v.total  
FROM cliente cl  
INNER JOIN venta_cliente vc ON cl.id_cliente = vc.id_cliente  
INNER JOIN venta v ON vc.id_venta = v.id_venta;
```

```
SELECT e.nombre AS empleado, t.dia, t.hora_inicio  
FROM empleado e  
LEFT JOIN empleado_turno et ON e.id_empleado =  
et.id_empleado  
LEFT JOIN Turno t ON et.id_turno = t.id_turno;
```

```
SELECT t.dia AS turno, e.nombre AS empleado  
FROM empleado_turno et  
RIGHT JOIN Turno t ON et.id_turno = t.id_turno  
RIGHT JOIN empleado e ON et.id_empleado = e.id_empleado;
```

```
SELECT cl.nombre AS cliente, v.fecha, v.total  
FROM cliente cl  
LEFT JOIN venta_cliente vc ON cl.id_cliente = vc.id_cliente  
LEFT JOIN venta v ON vc.id_venta = v.id_venta
```

2025/07/07 01:49

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SELECT cl.nombre AS cliente, v.fecha, v.total
FROM Venta v
LEFT JOIN Venta_cliente vc ON v.id_venta = vc.id_venta
LEFT JOIN cliente cl ON vc.id_cliente = cl.id_cliente;

```

```

SELECT v.fecha, c.tipo, v.total
FROM Venta v
INNER JOIN Combustible c ON v.id_combustible =
c.id_combustible
WHERE c.tipo = 'Gasolina corriente';

```

```

SELECT nombre FROM cliente
WHERE id_cliente = (SELECT MAX(id_cliente)
FROM cliente);

```

```

SELECT tipo FROM Combustible
WHERE id_combustible = (SELECT id_combustible
FROM Venta WHERE id_venta = 1);

```

```

SELECT nombre FROM Empleado
WHERE id_empleado IN (SELECT id_empleado
FROM Empleado_Turno
WHERE id_turno = 2);

```

```

SELECT precio FROM Combustible
WHERE id_combustible = (SELECT MIN(id_combustible)
FROM Combustible);

```

```

SELECT total FROM Venta
WHERE id_combustible = (SELECT id_combustible
FROM Combustible
WHERE tipo = 'Diesel');

```

```

DELIMITER //

```

```

CREATE FUNCTION fn_total_clientes () RETURNS INT
DETERMINISTIC

```

```

BEGIN

```

```

    DECLARE total INT;

```

```

    SELECT COUNT(*) INTO total FROM cliente;

```

```

    RETURN total;

```

```

END //

```



```

CREATE FUNCTION fn_total_empleados () RETURNS INT
DETERMINISTIC
BEGIN
    DECLARE total INT;
    SELECT COUNT(*) INTO total FROM empleado;
    RETURN total;
END //

```

```

CREATE FUNCTION fn_total_combustible () RETURNS INT
DETERMINISTIC
BEGIN
    DECLARE total INT;
    SELECT COUNT(*) INTO total FROM combustible;
    RETURN total;
END //

```

```

CREATE FUNCTION fn_nombre_cliente (pid INT) RETURNS
VARCHAR(100) DETERMINISTIC
BEGIN
    DECLARE nombre VARCHAR(100);
    SELECT nombre INTO nombre FROM cliente
    WHERE id_cliente = pid;
    RETURN nombre;
END //

```

```

CREATE FUNCTION fn_nombre_empleado (pid INT) RETURNS
VARCHAR(100) DETERMINISTIC
BEGIN
    DECLARE nombre VARCHAR(100);
    SELECT nombre INTO nombre FROM empleado
    WHERE id_empleado = pid;
    RETURN nombre;
END //

```

```

CREATE FUNCTION fn_precio_combustible (pid INT) RETURNS
DECIMAL(10,2) DETERMINISTIC
BEGIN
    DECLARE p DECIMAL(10,2);
    SELECT precio INTO p FROM combustible
    WHERE id_combustible = pid;
    RETURN p;
END //

```

2025/07/07 01:49

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```

CREATE FUNCTION fn_turno_dia (pid INT) RETURN
VARCHAR(20) DETERMINISTIC
BEGIN
    DECLARE d VARCHAR(20);
    SELECT dia INTO d FROM turno WHERE id_turno = pid;
    RETURN d;
END //

```

```

CREATE FUNCTION fn_total_venta () RETURN INT
DETERMINISTIC
BEGIN
    DECLARE total INT;
    SELECT COUNT(*) INTO total FROM venta;
    RETURN total;
END //

```

```

CREATE FUNCTION fn_total_turnos () RETURN INT
DETERMINISTIC
BEGIN
    DECLARE total INT;
    SELECT COUNT(*) INTO total FROM turno;
    RETURN total;
END //

```

```

CREATE FUNCTION fn_cargo_empleado (pid INT) RETURN
VARCHAR(50) DETERMINISTIC
BEGIN
    DECLARE c VARCHAR(50);
    SELECT cargo INTO c FROM empleado
    WHERE id_empleado = pid;
    RETURN c;
END //

```

```

CREATE PROCEDURE sp_insertar_cliente (
    IN pnombre VARCHAR(100),
    IN pcédula VARCHAR(20),
    IN ptelefono VARCHAR(20)
)
BEGIN
    INSERT INTO cliente (nombre, cédula, telefono)
    VALUES (pnombre, pcédula, ptelefono);
END //

DELIMITER ;

```



```
ALTER TABLE cliente ADD COLUMN correo  
VARCHAR(100);
```

```
ALTER TABLE cliente DROP COLUMN correo;
```

```
DROP TABLE Empleado_Turno;
```

```
DROP TABLE Venta_cliente;
```

```
DROP TABLE Venta;
```

```
DROP TABLE Turno;
```

```
DROP TABLE Combustible;
```

```
DROP TABLE empleado;
```

```
DROP TABLE cliente;
```

```
DROP DATABASE gasolinera;
```

2025/07/07 01:49

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