

## BASE DE DATOS

\* Link al motor de base de datos online

<https://onecompiler.com/mysql>

\* Consultas SQL DDL y DML

```
CREATE TABLE `tipo_inversor` (  
  `id_tipo_inversor` INT NOT NULL AUTO_INCREMENT,  
  `tipo_inversor` VARCHAR(45) NULL,  
  PRIMARY KEY (`id_tipo_inversor`))  
ENGINE = InnoDB;
```

```
CREATE TABLE `inversor` (  
  `id_tipo_inversor` INT NOT NULL,  
  `cuit_o_cuil` VARCHAR(11) NOT NULL,  
  `nombre` VARCHAR(45) DEFAULT NULL,  
  `apellido` VARCHAR(45) DEFAULT NULL,  
  `email` VARCHAR(200) DEFAULT NULL,  
  `contrasena` VARCHAR(45) DEFAULT NULL,  
  `fecha_alta_inversor` DATE DEFAULT NULL,  
  `saldo_inicial` DECIMAL(10, 2) DEFAULT NULL,  
  PRIMARY KEY (`cuit_o_cuil`),  
  INDEX `cuit_o_cuil_idx` (`cuit_o_cuil` ASC) VISIBLE,  
  CONSTRAINT `fk_id_tipo_inversor`  
    FOREIGN KEY (`id_tipo_inversor`)  
    REFERENCES `tipo_inversor` (`id_tipo_inversor`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```

CREATE TABLE `accion` (
  `id_accion` INT NOT NULL AUTO_INCREMENT,
  `nombre_accion` VARCHAR(45) NULL,
  `simbolo_accion` VARCHAR(45) NULL,
  PRIMARY KEY (`id_accion`))
ENGINE = InnoDB;

CREATE TABLE `cotizacion` (
  `id_cotizacion_accion` INT NOT NULL AUTO_INCREMENT,
  `id_accion` INT NOT NULL,
  `fecha_hora` DATETIME(6) NULL,
  `precio_venta` FLOAT NULL,
  `precio_compra` FLOAT NULL,
  PRIMARY KEY (`id_cotizacion_accion`),
  INDEX `id_accion_idx` (`id_accion` ASC) VISIBLE,
  CONSTRAINT `id_accion`
    FOREIGN KEY (`id_accion`)
      REFERENCES `accion` (`id_accion`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

CREATE TABLE `tipo_transaccion` (
  `id_tipo_transaccion` INT NOT NULL AUTO_INCREMENT,
  `tipo_transaccion` VARCHAR(45) NULL,
  PRIMARY KEY (`id_tipo_transaccion`))
ENGINE = InnoDB;

```

```

CREATE TABLE `transaccion` (
  `id_transaccion` INT NOT NULL AUTO_INCREMENT,
  `id_tipo_transaccion` INT NOT NULL,

```

```

`cuit_o_cuil` VARCHAR(11) NOT NULL,
`id_cotizacion_accion` INT NOT NULL,
`cantidad_accion` FLOAT NULL,
`fecha_hora_transaccion` DATETIME(6) NULL,
`valor_transaccion` FLOAT NULL,
PRIMARY KEY (`id_transaccion`),
INDEX `cuit_o_cuil_idx` (`cuit_o_cuil` ASC) INVISIBLE,
INDEX `id_cotizacion_accion_idx` (`id_cotizacion_accion` ASC) VISIBLE,
INDEX `id_tipo_transaccion_idx` (`id_tipo_transaccion` ASC) INVISIBLE,
CONSTRAINT `cuit_o_cuil`
    FOREIGN KEY (`cuit_o_cuil`)
    REFERENCES `inversor` (`cuit_o_cuil`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
CONSTRAINT `id_cotizacion_accion`
    FOREIGN KEY (`id_cotizacion_accion`)
    REFERENCES `cotizacion` (`id_cotizacion_accion`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
CONSTRAINT `id_tipo_transaccion`
    FOREIGN KEY (`id_tipo_transaccion`)
    REFERENCES `tipo_transaccion` (`id_tipo_transaccion`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

CREATE TABLE `broker` (
    `id_comision` INT NOT NULL AUTO_INCREMENT,
    `id_transaccion` INT NOT NULL,
    `comision` FLOAT NULL,
    PRIMARY KEY (`id_comision`),

```

```
INDEX `id_transaccion_idx` (`id_transaccion` ASC) VISIBLE,  
CONSTRAINT `id_transaccion`  
  FOREIGN KEY (`id_transaccion`)  
  REFERENCES `transaccion` (`id_transaccion`)  
  ON DELETE NO ACTION  
  ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
INSERT INTO accion (nombre_accion, simbolo_accion)  
VALUES ("Yacimientos", "YPF"),  
      ("Aceitera", "AGD"),  
      ("ArcorArgentina", "ARCOR"),  
      ("Google", "GOO");
```

```
INSERT INTO cotizacion (id_accion, fecha_hora, precio_venta, precio_compra)  
VALUES (1, "2024-10-20 15:20:09.000000", 1.79, 1.89),  
      (1, "2024-10-20 10:04:12.000000", 1.09, 1.18),  
      (3, "2024-10-20 10:04:27.000000", 1.09, 1.18),  
      (3, "2024-10-20 10:36:04.000000", 1.29, 1.38),  
      (2, "2024-10-20 10:36:29.000000", 2.29, 2.30),  
      (4, "2024-10-19 10:20:29.000000", 1.30, 1.50);
```

```
INSERT INTO tipo_inversor (tipo_inversor)  
VALUES ("Física"),  
      ("Jurídica");
```

```
INSERT INTO tipo_transaccion (tipo_transaccion)  
VALUES ("Compra"),  
      ("Venta");
```

```
INSERT INTO inversor (id_tipo_inversor, cuit_o_cuil, nombre, apellido, email, contrasena, fecha_alta_inversor, saldo_inicial)
```

```
VALUES (1, "27217183974", "Mariela", "Suarez", "marielarosa@gmail.com", "Hola567*", "2024-09-15", 1000000),
```

```
(1, "20112223338", "Estela", "Cáceres", "caceres.estela@gmail.com", "Yo$567pp", "2024-09-19", 1000000),
```

```
(1, "20253428997", "Ulises", "Martinelli", "ulisesmar@gmail.com", "Arg00Cor$8", "2024-10-18", 1000000);
```

```
INSERT INTO transaccion (id_tipo_transaccion, cuit_o_cuil, id_cotizacion_accion, cantidad_accion, fecha_hora_transaccion, valor_transaccion)
```

```
VALUES (1, "27217183974", 2, 5, "2020-10-24 23:56:00", 1.09),
```

```
(1, "20253428997", 2, 3, "2020-10-20 10:53:00", 1.38),
```

```
(2, "27217183974", 3, 5, "2020-10-24 19:56:00", 1.38),
```

```
(1, "20112223338", 2, 15, "2021-10-24 23:56:00", 1.09);
```

```
INSERT INTO broker (id_transaccion, comision)
```

```
VALUES (1, 1.64),
```

```
(2, 1.09),
```

```
(3, 1.38);
```

```
SELECT * FROM transaccion;
```

```
SELECT id_comision, comision
```

```
FROM broker
```

```
WHERE comision > 1.99;
```

```
SELECT id_accion, precio_venta, precio_compra
```

```
FROM cotizacion
```

```
WHERE fecha_hora BETWEEN "2020-10-24 0:0:0" AND NOW();
```

```
SELECT nombre_accion, simbolo_accion
```

```
FROM accion
```

```
WHERE nombre_accion LIKE "Y%";
```

```
SELECT MAX(valor_transaccion), MIN(valor_transaccion)
FROM transaccion
WHERE id_tipo_transaccion = 1;
```

```
SELECT cuit_o_cuil, apellido, nombre, email
FROM inversor
ORDER BY apellido, nombre;
```

```
SELECT id_tipo_transaccion, SUM(valor_transaccion)
FROM transaccion
GROUP BY id_tipo_transaccion;
```

```
SELECT accion.nombre_accion, cotizacion.fecha_hora, cotizacion.precio_venta
FROM accion JOIN cotizacion
ON accion.id_accion = cotizacion.id_accion;
```

```
SELECT inversor.apellido, inversor.nombre, transaccion.cantidad_accion,
transaccion.valor_transaccion
FROM inversor LEFT JOIN transaccion
ON inversor.cuit_o_cuil = transaccion.cuit_o_cuil;
```

```
SELECT inversor.apellido, inversor.nombre, tipo_transaccion.tipo_transaccion,
transaccion.valor_transaccion
FROM inversor JOIN transaccion
ON inversor.cuit_o_cuil = transaccion.cuit_o_cuil
JOIN tipo_transaccion
ON transaccion.id_tipo_transaccion = tipo_transaccion.id_tipo_transaccion;
```

```
UPDATE cotizacion
SET precio_venta = 1.19, precio_compra = 1.15
```

```
WHERE id_cotizacion_accion = 2;
```

```
UPDATE inversor
```

```
SET nombre = "Stella"
```

```
WHERE cuit_o_cuil = "20112223338";
```

```
UPDATE inversor
```

```
SET fecha_alta_inversor = "2010-10-24"
```

```
WHERE cuit_o_cuil = "20999999990";
```

```
UPDATE transaccion
```

```
SET cantidad_accion = 8
```

```
WHERE id_transaccion = 3;
```

```
UPDATE transaccion
```

```
SET valor_transaccion = 1.65
```

```
WHERE cuit_o_cuil = "27217183974" AND id_cotizacion_accion = 2;
```

Input for the program ( Optional )

Output:

id_transaccion		id_tipo_transaccion		cuit_o_cuil		id_cotizacion_accion		cantidad_accion		fecha_hora_transaccion		valor_transaccion	
1		1		27217183974		2		5		2020-10-24 23:56:00.000000		1.09	
2		1		20253428997		2		3		2020-10-20 10:53:00.000000		1.38	
3		2		27217183974		3		5		2020-10-24 19:56:00.000000		1.38	
4		1		20112223338		2		15		2021-10-24 23:56:00.000000		1.09	
id_accion		precio_venta		precio_compra									
1		1.79		1.89									
1		1.09		1.18									
3		1.09		1.18									
3		1.29		1.38									
2		2.29		2.3									
4		1.3		1.5									
nombre_accion		simbolo_accion											
Yacimientos		YPF											
MAX(valor_transaccion)				MIN(valor_transaccion)									
1.38				1.09									

Input for the program ( Optional )

cuit_o_cuil	apellido	nombre	email
20112223338	Cáceres	Estela	caceres.estela@gmail.com
20253428997	Martinelli	Ulises	ulisesmar@gmail.com
27217183974	Suarez	Mariela	marielarosa@gmail.com
id_tipo_transaccion	SUM(valor_transaccion)		
1	3.5600000619888306		
2	1.3799999952316284		
nombre_accion	fecha_hora	precio_venta	
Yacimientos	2024-10-20 15:20:09.000000	1.79	
Yacimientos	2024-10-20 10:04:12.000000	1.09	
Aceitera	2024-10-20 10:36:29.000000	2.29	
ArcorArgentina	2024-10-20 10:04:27.000000	1.09	
ArcorArgentina	2024-10-20 10:36:04.000000	1.29	
Google	2024-10-19 10:20:29.000000	1.3	
apellido	nombre	cantidad_accion	valor_transaccion
Cáceres	Estela	15	1.09
Martinelli	Ulises	3	1.38
Suarez	Mariela	5	1.38
Suarez	Mariela	5	1.09
apellido	nombre	tipo_transaccion	valor_transaccion
Suarez	Mariela	Compra	1.09
Martinelli	Ulises	Compra	1.38
Suarez	Mariela	Venta	1.38
Cáceres	Estela	Compra	1.09