

# Introduction to SQL

By Osama Dad

```
create database store;

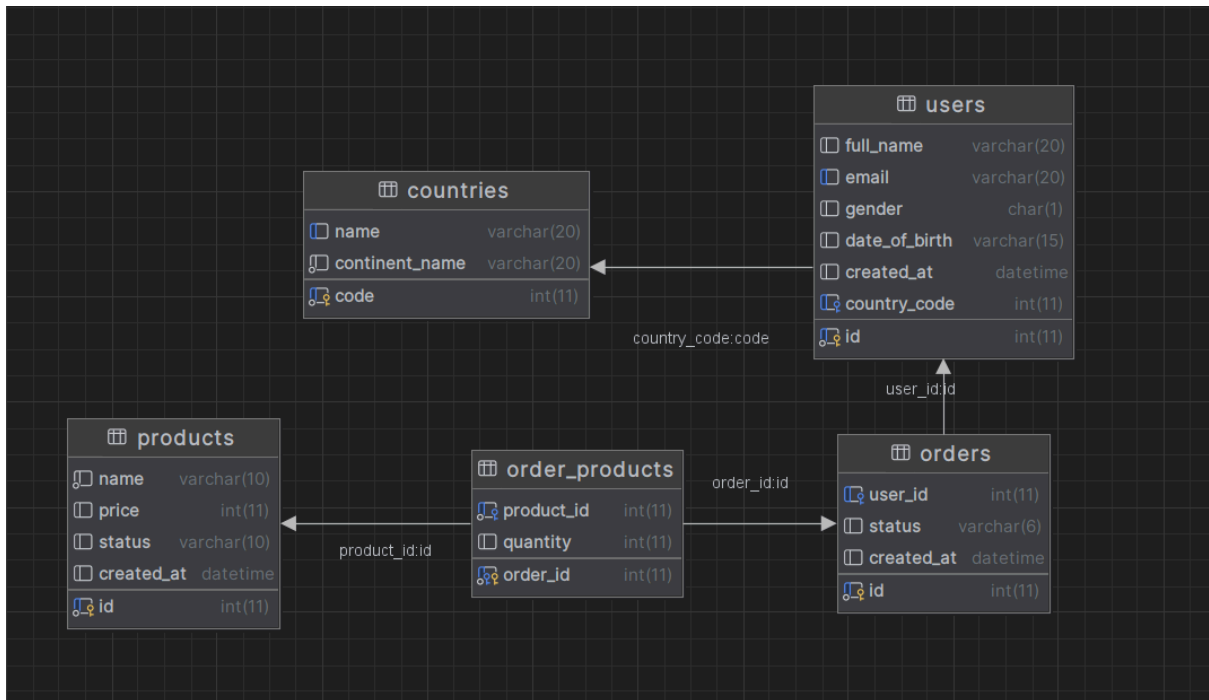
create table countries(
    code int primary key,
    name varchar(20) unique ,
    continent_name varchar(20) not null
);

create table users(
    id int primary key,
    full_name varchar(20),
    email varchar(20) unique ,
    gender char(1) check ( gender='m' or gender='f' ),
    date_of_birth varchar(15),
    created_at datetime default now(),
    country_code int,
    foreign key (country_code) references countries (code)
);

create table orders(
    id int primary key,
    user_id int,
    status varchar(6) check ( status='start' or status='finish' ),
    created_at datetime default now(),
    foreign key (user_id) references users (id)
);

create table products(
    id int primary key,
    name varchar(10) not null ,
    price int default 0,
    status varchar(10) check ( status='valid' or status='expired' ),
    created_at datetime default now()
);

create table order_products(
    order_id int primary key,
    product_id int not null unique,
    foreign key (order_id) references orders (id),
    foreign key (product_id) references products (id),
    quantity int default 0
);
```



## 1)Countries table

```

insert into countries (code, name, continent_name)
values (101,'saudi arabia','asia');
insert into countries (code, name, continent_name)
values (102,'USA','north america');
insert into countries (code, name, continent_name)
values (103,'brazil','south america');
insert into countries (code, name, continent_name)
values (104,'germany','europe');
insert into countries (code, name, continent_name)
values (105,'japan','asia');

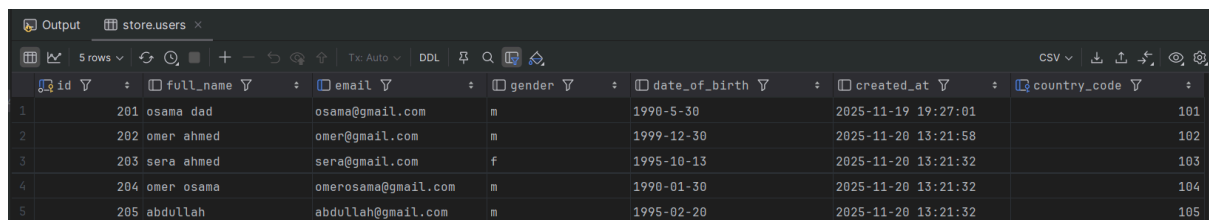
select * from countries;
  
```

Output <span>store.countries</span> ×				
	code	name	continent_name	
1	101	saudi arabia	middle east	
2	102	USA	north america	
3	103	brazil	south america	
4	104	germany	europe	
5	105	japan	asia	

## 2)Users table

```
insert into users (id, full_name, email, gender, date_of_birth, country_code)
values (201,'osama dad','osama@gmail.com','m','1990-5-30',101);
insert into users (id, full_name, email, gender, date_of_birth, country_code)
values (202,'omer ahmed','omer@gmail.com','m','1999-12-30',102);
insert into users (id, full_name, email, gender, date_of_birth, country_code)
values (203,'sera ahmed','sera@gmail.com','f','1995-10-13',103);
insert into users (id, full_name, email, gender, date_of_birth, country_code)
values (204,'omer osama','omerosama@gmail.com','m','1990-01-30',104);
insert into users (id, full_name, email, gender, date_of_birth, country_code)
values (205,'abdullah','abdullah@gmail.com','m','1995-02-20',105);

select * from users;
```

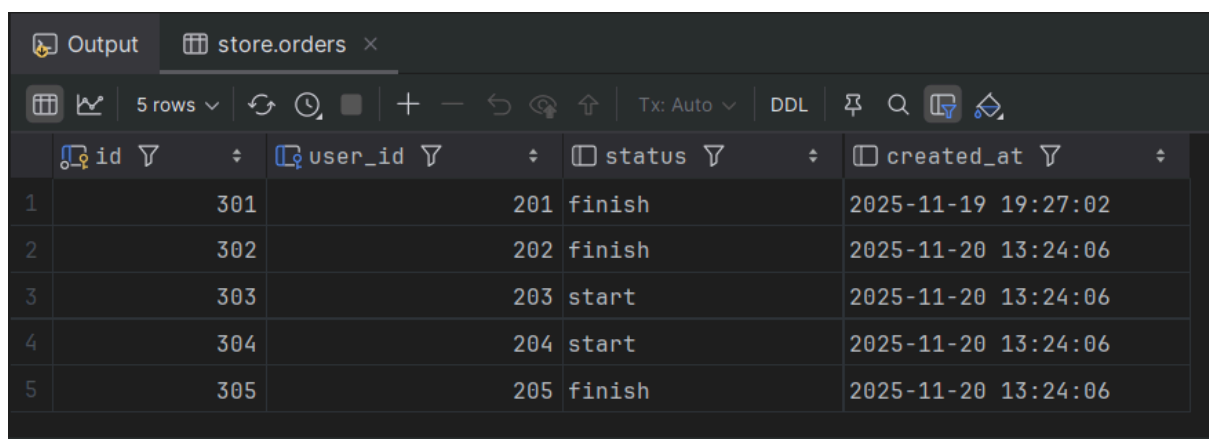


	id	full_name	email	gender	date_of_birth	created_at	country_code
1	201	osama dad	osama@gmail.com	m	1990-5-30	2025-11-19 19:27:01	101
2	202	omer ahmed	omer@gmail.com	m	1999-12-30	2025-11-20 13:21:58	102
3	203	sera ahmed	sera@gmail.com	f	1995-10-13	2025-11-20 13:21:32	103
4	204	omer osama	omerosama@gmail.com	m	1990-01-30	2025-11-20 13:21:32	104
5	205	abdullah	abdullah@gmail.com	m	1995-02-20	2025-11-20 13:21:32	105

## 3)Orders table

```
insert into orders (id, user_id, status)
values (301,201, 'finish');
insert into orders (id, user_id, status)
values (302,202, 'finish');
insert into orders (id, user_id, status)
values (303,203, 'start');
insert into orders (id, user_id, status)
values (304,204, 'start');
insert into orders (id, user_id, status)
values (305,205, 'finish');

select * from orders;
```

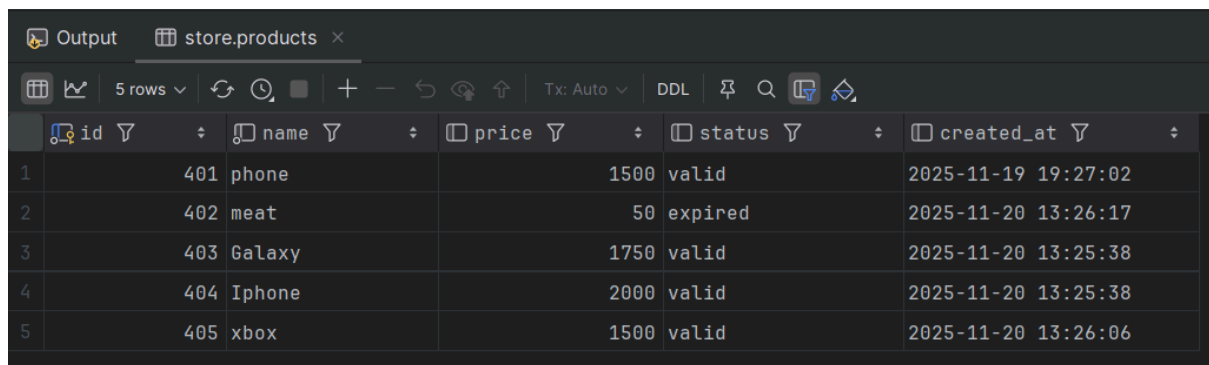


	id	user_id	status	created_at
1	301	201	finish	2025-11-19 19:27:02
2	302	202	finish	2025-11-20 13:24:06
3	303	203	start	2025-11-20 13:24:06
4	304	204	start	2025-11-20 13:24:06
5	305	205	finish	2025-11-20 13:24:06

## 4)Products table

```
insert into products (id, name, price, status)
values (401, 'phone',1500, 'valid');
insert into products (id, name, price, status, created_at)
values (402, 'meat',50, 'expired', default);
insert into products (id, name, price, status)
values (403,'Galaxy',1750,'valid');
insert into products (id, name, price, status)
values (404,'Iphone',2000,'valid');
insert into products (id, name, price, status)
values (405,'xbox',1500,'valid');

select * from products;
```



	id	name	price	status	created_at
1	401	phone	1500	valid	2025-11-19 19:27:02
2	402	meat	50	expired	2025-11-20 13:26:17
3	403	Galaxy	1750	valid	2025-11-20 13:25:38
4	404	Iphone	2000	valid	2025-11-20 13:25:38
5	405	xbox	1500	valid	2025-11-20 13:26:06

## 5)Order\_products table

```
insert into order_products (order_id, product_id, quantity)
values (301,401,2);
insert into order_products (order_id, product_id, quantity)
values (302,402,5);
insert into order_products (order_id, product_id, quantity)
values (303,403,1);
insert into order_products (order_id, product_id, quantity)
values (304,404,1);
insert into order_products (order_id, product_id, quantity)
values (305,405,20);

select * from order_products;
```

Output <span>store.order_products</span>			
	order_id	product_id	quantity
1	301	401	2
2	302	402	5
3	303	403	1
4	304	404	1
5	305	405	20

## - Update the countries row

```
update countries set continent_name='middle east' where code=101;
```

Output <span>store.products 3</span> <span>store.orders</span> <span>store.order_products</span>			
	code	name	continent_name
1	101	saudi arabia	middle east

## - Delete product row

```
delete from order_products where product_id=402;
delete from products where id=402;
```

Output <span>store.order_products</span>			
	order_id	product_id	quantity
1	301	401	2
2	303	403	1
3	304	404	1
4	305	405	20

Outputstore.products

4 rows

Tx: AutoDDL

	id	name	price	status	created_at
1	401	phone	1500	valid	2025-11-19 19:27:02
2	403	Galaxy	1750	valid	2025-11-20 13:25:38
3	404	Iphone	2000	valid	2025-11-20 13:25:38
4	405	xbox	1500	valid	2025-11-20 13:26:06