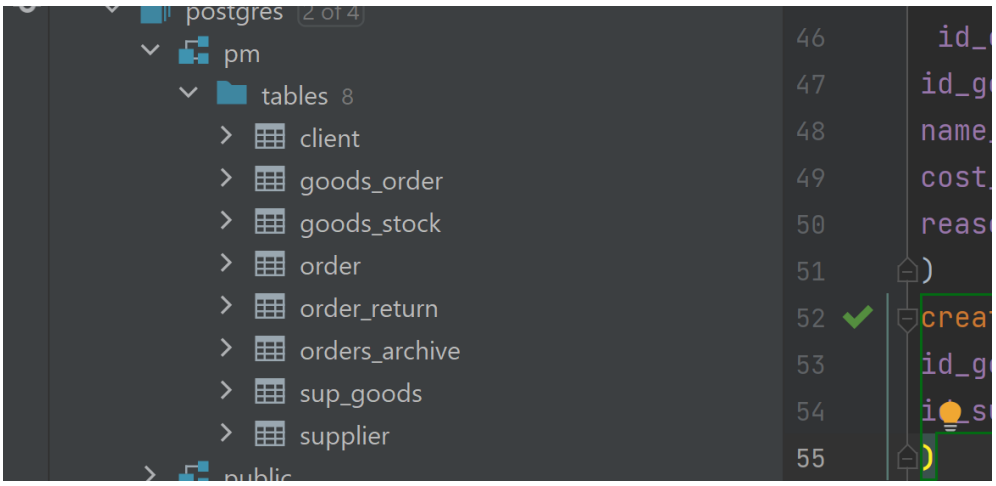
Вторая итерация по проекту

3)Подготовить DDL скрипты и создать свою базу в СУБД.

```
create schema if not exists pm
create table if not exists pm.goods_stock (
id_goods integer not null primary key,
id_supplier integer not null,
name_goods varchar(64) not null,
desc_goods varchar(256),
cost_goods integer not null
)
create table if not exists pm.supplier (
id_supplier integer not null primary key,
fullname_supplier varchar(256) not null,
phone_supplier varchar(64) not null,
address_supplier varchar(256) not null,
name_goods1 varchar(64) not null,
name_goods2 varchar(64) not null,
)
create table if not exists pm.order (
id_order integer not null primary key,
id_client  integer not null,
name_goods1 varchar(64) not null,
name_goods2 varchar(64) not null,
cost_order  integer not null
)
create table if not exists pm.goods_order (
id_order integer not null primary key,
id_supplier integer not null,
name_goods varchar(64) not null,
amount_goods integer not null,
cost_goods integer not null
)
create table if not exists pm.client (
id_client  integer not null primary key,
fullname_client varchar(256) not null,
datage_client  date not null,
gender_client varchar(64) not null,
amount_gclient integer not null
)
create table if not exists pm.orders_archive (
id_order integer not null primary key,
id_client  integer not null,
time_order date not null,
cost_order integer not null
)
create table if not exists pm.order_return (
 id_order integer not null primary key,
id_goods integer not null,
name_goods varchar(64) not null,
cost_return integer not null,
```

```
reason_return varchar(256) not null
)
create table if not exists pm.sup_goods (
id_goods integer not null primary key,
id_supplier integer not null
)
```

Скриншот:



4)Наполнить созданную базу данными, 10 записей в каждой таблице.

```
insert into pm.goods_stock (id_goods, id_supplier, name_goods,
desc_goods, cost_goods) values
(1, 1, 'Barbie doll', 'toy girl', 1000),
(2, 1, 'Toy car', 'toy for boys', 700),
(3, 2, 'Barbie doll', 'toy for girl', 1000),
(4, 3, 'Puzzles','development for children and adults', 500),
(5, 3, 'Puzzles version 2','development for adults', 800),
(6, 4, 'Markers', 'designed for drawing', 300),
(7, 4, 'Pencils', 'designed for drawing', 250),
(8, 5, 'Kids sunglasses', 'designed for children', 1500),
(9, 6, 'Sketchbook', 'designed for drawing',  230),
(10, 6, 'Notebook', 'designed for drawing',  210);

insert into pm.supplier (id_supplier, fullname_supplier,
phone_supplier, address_supplier, name_goods1, name_goods2)
values
(1, 'Ivanov Ivan Dmitrievich', '89797845', 'street Pushkin 5',
'Toy car', 'Notebook'),
(2, 'Grozd Nikolay Ivanovich', '89233454', 'street Pushkin 9',
'Puzzles', 'Barbie doll'),
(3, 'Torova Anastasia Sergeevna','89231154', 'street Pobedy 9',
'Puzzles', 'Puzzles version 2'),
(4, 'Robov Konstantin Denisovich', '86786745', 'street Kaluznaya
3', 'Markers', 'Pencils'),
(5, 'Frolova Karina Viktorovna', '84565690', 'street Grozny 12',
```

```
'Kids sunglasses', 'Barbie doll'),
(6, 'Smirov Egor Alexandrovich', '87899832', 'street Tverskaya
3', 'Sketchbook', 'Notebook'),
(7, 'Grozdin Nikolay Sergeeevich', '89234554', 'street Petrova
9', 'Puzzles version 2', 'Barbie doll'),
(8, 'Rybov Anna Georgievna', '89234555', 'street Tverskaya 5',
'Puzzles', 'Pencils'),
(9, 'Ivanova Karina Vladimirovna', '892534554', 'street Pobedy
12', 'Markers', 'Barbie doll'),
(10, 'Kolov Sergey Sergeevich', '824234554', 'street Pobedy
1','Puzzles', 'Barbie doll'),
(11, 'Grozdov Nikolay Sergeeevich', '89034554', 'street Petrova
25', 'Puzzles', 'Pencils');
insert into pm.order (id_order, id_client,  name_goods1,
name_goods2,  cost_order) values
(1, 1, 'Puzzles', 'Pencils', 2500),
(2, 2, 'Puzzles', 'Barbie doll', 2000),
(3, 4, 'Markers', 'Pencils', 1800),
(4, 5, 'Puzzles version 2', 'Barbie doll', 5000),
(5, 3, 'Kids sunglasses', 'Barbie doll', 4000),
(6, 1, 'Puzzles', 'Markers', 8000),
(7, 4, 'Toy Car', 'Pencils', 2900),
(8, 6, 'Puzzles', 'Puzzles version 2', 3000),
(9, 7, 'Pencils', 'Puzzles version 2', 4000),
(10, 2, 'Toy Car', 'Barbie doll', 2900);
insert into pm.goods_order (id_order, id_supplier, name_goods,
amount_goods, cost_goods) values
(1, 3, 'Puzzles', 3, 1500),
(2, 3, 'Puzzles', 2, 1000),
(3, 9, 'Markers', 1, 300),
(4, 3, 'Puzzles version 2', 3, 2400),
(5, 5, 'Kids sunglasses', 2, 3000),
(6, 3,'Puzzles', 1, 500),
(7, 1,'Toy car', 1, 700),
(8, 3, 'Puzzles', 3, 1500),
(9, 3, 'Puzzles version 2', 2, 1600),
(10, 1, 'Toy car', 3, 2100);
insert into pm.client (id_client, fullname_client,
datage_client,  gender_client, amount_gclient) values
(1, 'Ftorova Karina Sergeevna', '23', 'female', 100),
(2, 'Ivanov Ivan Sergeevich', '35', 'male', 32),
(3, 'Ivanova Svetlana Sergeevna', '18', 'female', 25),
(4, 'Bykin Ivan Ivanovich', '45', 'male', 150),
(5, 'Tropina Galina Vladimirovna', '55', 'female', 89),
(6, 'Bykina Elena Georgievna', '43', 'female', 150),
(7, 'Bykov Ivan Ivanovich', '21', 'male', 13),
(8, 'Ftorova Marina Sergeevna', '28', 'female', 56),
(9, 'Torkov Vladimir Denisovich', '18', 'male', 23),
(10, 'Mashkova Nadeya Ivanovna', '19', 'female', 77);
insert into pm.orders_archive(id_order, id_client, time_order,
cost_order) values
(1, 1, '2023-01-02', 2500),
(2, 2, '2023-01-03', 2000),
```

```
(3, 4, '2023-01-07', 1800),
(4, 5, '2023-02-01', 5000),
(5, 3, '2023-02-05', 4000),
(6, 1, '2023-02-10', 8000),
(7, 4, '2023-02-11', 2900),
(8, 6, '2023-03-01', 3000),
(9, 7, '2023-03-03', 4000),
(10, 2, '2023-04-01', 2900);
insert into pm.order_return (id_order, id_goods, name_goods,
cost_return, reason_return) values
(1, 4, 'Puzzles', 500, 'broken'),
(2, 11, 'Puzzles', 500, 'broken'),
(3, 6, 'Markers', 300, 'too dim'),
(4, 5, 'Puzzles version 2', 800, 'too small'),
(5, 8, 'Kids sunglasses', 1500, 'broken'),
(6, 12, 'Puzzles', 500, 'too expensive'),
(7, 2, 'Toy car', 700, 'too small'),
(8, 15, 'Puzzles', 1000, 'inappropriate quality'),
(9, 20, 'Puzzles version 2', 1600, 'too small'),
(10, 17, 'Toy car', 700, 'inappropriate quality');
insert into pm.sup_goods(id_goods, id_supplier) values
(1, 1),
(2, 2),
(3, 2),
(4, 3),
(5, 3),
(6, 4),
(7, 4),
(8, 5),
(9, 6),
(10, 6)
```

Скриншоты:

```
postgres.public> insert into pm.goods_stock (id_goods, id_supplier, name_goods, desc_goods, cost_goods) values
                 (1, 1, 'Barbie doll', 'toy girl', 1000),
                 (2, 1, 'Toy car', 'toy for boys', 700),
                 (3, 2, 'Barbie doll', 'toy for girl', 1000),
                 (4, 3, 'Puzzles','development for children and adults', 500),
                 (5, 3, 'Puzzles version 2','development for adults', 800),
                 (6, 4, 'Markers', 'designed for drawing', 300),
                 (7, 4, 'Pencils', 'designed for drawing', 250),
                 (8, 5, 'Kids sunglasses', 'designed for children', 1500),
                 (9, 6, 'Sketchbook', 'designed for drawing',  230),
                 (10, 6, 'Notebook', 'designed for drawing',  210)
[2023-04-06 03:38:39] 10 rows affected in 47 ms
```

```
[2023-04-06 03:38:39] 10 rows affected in 47 ms
postgres.public> insert into pm.supplier (id_supplier, fullname_supplier, phone_supplier, address_supplier, name_goods1, na
                 (1, 'Ivanov Ivan Dmitrievich', '89797845', 'street Pushkin 5', 'Toy car', 'Notebook'),
                 (2, 'Grozd Nikolay Ivanovich', '89233454', 'street Pushkin 9', 'Puzzles', 'Barbie doll'),
                 (3, 'Torova Anastasia Sergeevna','89231154', 'street Pobedy 9', 'Puzzles', 'Puzzles version 2'),
                 (4, 'Robov Konstantin Denisovich', '86786745', 'street Kaluznaya 3', 'Markers', 'Pencils'),
                 (5, 'Frolova Karina Viktorovna', '84565690', 'street Grozny 12', 'Kids sunglasses', 'Barbie doll'),
                 (6, 'Smirov Egor Alexandrovich', '87899832', 'street Tverskaya 3', 'Sketchbook', 'Notebook'),
                 (7, 'Grozdin Nikolay Sergeeevich', '89234554', 'street Petrova 9', 'Puzzles version 2', 'Barbie doll'),
                 (8, 'Rybov Anna Georgievna', '89234555', 'street Tverskaya 5', 'Puzzles', 'Pencils'),
                 (9, 'Ivanova Karina Vladimirovna', '892534554', 'street Pobedy 12', 'Markers', 'Barbie doll'),
                 (10, 'Kolov Sergey Sergeevich', '824234554', 'street Pobedy 1','Puzzles', 'Barbie doll'),
                 (11, 'Grozdov Nikolay Sergeeevich', '89034554', 'street Petrova 25', 'Puzzles', 'Pencils')
[2023-04-06 03:39:37] 11 rows affected in 52 ms
```

```
postgres.public> insert into pm.order (id_order, id_client,  name_goods1, name_goods2,  cost_order) values
                 (1, 1, 'Puzzles', 'Pencils', 2500),
                 (2, 2, 'Puzzles', 'Barbie doll', 2000),
                 (3, 4, 'Markers', 'Pencils', 1800),
                 (4, 5, 'Puzzles version 2', 'Barbie doll', 5000),
                 (5, 3, 'Kids sunglasses', 'Barbie doll', 4000),
                 (6, 1, 'Puzzles', 'Markers', 8000),
                 (7, 4, 'Toy Car', 'Pencils', 2900),
                 (8, 6, 'Puzzles', 'Puzzles version 2', 3000),
                 (9, 7, 'Pencils', 'Puzzles version 2', 4000),
                 (10, 2, 'Toy Car', 'Barbie doll', 2900)
[2023-04-06 03:39:52] 10 rows affected in 49 ms
```

```
[2023-04-06 03:39:52] 10 rows affected in 49 ms
postgres.public> insert into pm.goods_order (id_order, id_supplier, name_goods, amount_goods, cost_goods) values
                 (1, 3, 'Puzzles', 3, 1500),
                 (2, 3, 'Puzzles', 2, 1000),
                 (3, 9, 'Markers', 1, 300),
                 (4, 3, 'Puzzles version 2', 3, 2400),
                 (5, 5, 'Kids sunglasses', 2, 3000),
                 (6, 3,'Puzzles', 1, 500),
                 (7, 1,'Toy car', 1, 700),
                 (8, 3, 'Puzzles', 3, 1500),
                 (9, 3, 'Puzzles version 2', 2, 1600),
                 (10, 1, 'Toy car', 3, 2100)
[2023-04-06 03:40:08] 10 rows affected in 54 ms
```

```
postgres.public> insert into pm.client (id_client, fullname_client, datage_client,  gender_client, amount_gclient) values
                 (1, 'Ftorova Karina Sergeevna', '23', 'female', 100),
                 (2, 'Ivanov Ivan Sergeevich', '35', 'male', 32),
                 (3, 'Ivanova Svetlana Sergeevna', '18', 'female', 25),
                 (4, 'Bykin Ivan Ivanovich', '45', 'male', 150),
                 (5, 'Tropina Galina Vladimirovna', '55', 'female', 89),
                 (6, 'Bykina Elena Georgievna', '43', 'female', 150),
                 (7, 'Bykov Ivan Ivanovich', '21', 'male', 13),
                 (8, 'Ftorova Marina Sergeevna', '28', 'female', 56),
                 (9, 'Torkov Vladimir Denisovich', '18', 'male', 23),
                 (10, 'Mashkova Nadeya Ivanovna', '19', 'female', 77)
```

5)Написать не менее 10 запросов(insert, select…).

1.select * from pm.client

2.select * from pm.client order by pm.client.amount_gclient

3.delete from pm.orders_archive where time_order = ‘2023-01-02’

update pm.supplier set address=’street Pobedy 5’ where id_supplier = 3

4.insert into pm.goods_stock (id_goods, id_supplier, name_goods, desc_goods, cost_goods) values

(11, 1, ‘Ken doll’, ‘toy for girl’, 1200)

5.update pm.supplier set phone_supplier=’89390393’ where id_supplier = 4

6.select name_goods, reason_return from pm.order_return

7.select datage_client, gender_client, amount_gclient from pm.client

8.delete from pm.supplier where id_supplier=2

9.insert into pm.order_return (id_order, id_goods, name_goods, cost_return, reason_return) values
(13, 4, 'Puzzles', 1500, 'broken')

10.insert into pm.goods_stock(id_goods, id_supplier, name_goods, desc_goods, cost_goods) values

(15, (select id_supplier from pm.supplier where pm.supplier.id_supplier = 1), (select name_goods from pm.supplier where pm.supplier.id_supplier = 1),’for children’, 2000)

Скриншоты(последний скриншот на 10 запрос):

```
select * from pm.client
```

Output | postgres.pm.client

10 rows | Tx: Auto | DDL | CSV

	id_client	fullname_client	datage_client	gender_client	amount_gclient
1	1	Ftorova Karina Sergeevna	1998-09-09	female	1000
2	2	Ivanov Ivan Sergeevich	1988-08-09	male	32
3	3	Ivanova Svetlana Sergeevna	2003-10-06	female	25
4	4	Bykin Ivan Ivanovich	2000-09-09	male	150
5	5	Tropina Galina Vladimirovna	2001-09-10	female	89
6	6	Bykina Elena Georgievna	1979-05-04	female	150
7	7	Bykov Ivan Ivanovich	1998-11-09	male	13
8	8	Ftorova Marina Sergeevna	2002-03-01	female	56
9	9	Torkov Vladimir Denisovich	1980-01-01	male	23
10	10	Mashkova Nadeya Ivanovna	1975-03-08	female	77

(3 sec, 885 ms) (a minute ago) CRLF UTF-8 4 spaces hw1task10

ENG 4:01 06.04.2023

```
select * from pm.client order by pm.client.amount_gclient
```

hw1task06.sql
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Output | postgres.pm.client

10 rows | Tx: Auto | DDL | CSV

	id_client	fullname_client	datage_client	gender_client	amount_gclient
1	7	Bykov Ivan Ivanovich	1998-11-09	male	13
2	9	Torkov Vladimir Denisovich	1980-01-01	male	23
3	3	Ivanova Svetlana Sergeevna	2003-10-06	female	25
4	2	Ivanov Ivan Sergeevich	1988-08-09	male	32
5	8	Ftorova Marina Sergeevna	2002-03-01	female	56
6	10	Mashkova Nadeya Ivanovna	1975-03-08	female	77
7	5	Tropina Galina Vladimirovna	2001-09-10	female	89
8	6	Bykina Elena Georgievna	1979-05-04	female	150
9	4	Bykin Ivan Ivanovich	2000-09-09	male	150
10	1	Ftorova Karina Sergeevna	1998-09-09	female	1000

Tx: Auto | Playground | postgres.public | console

```
insert into pm.goods_stock (id_goods, id_supplier, name_goods, desc_goods, cost_goods) val
(11, 1, 'Ken doll', 'toy for girl', 1200);
select * from pm.goods_stock
```

hw1task06.sql
README.md
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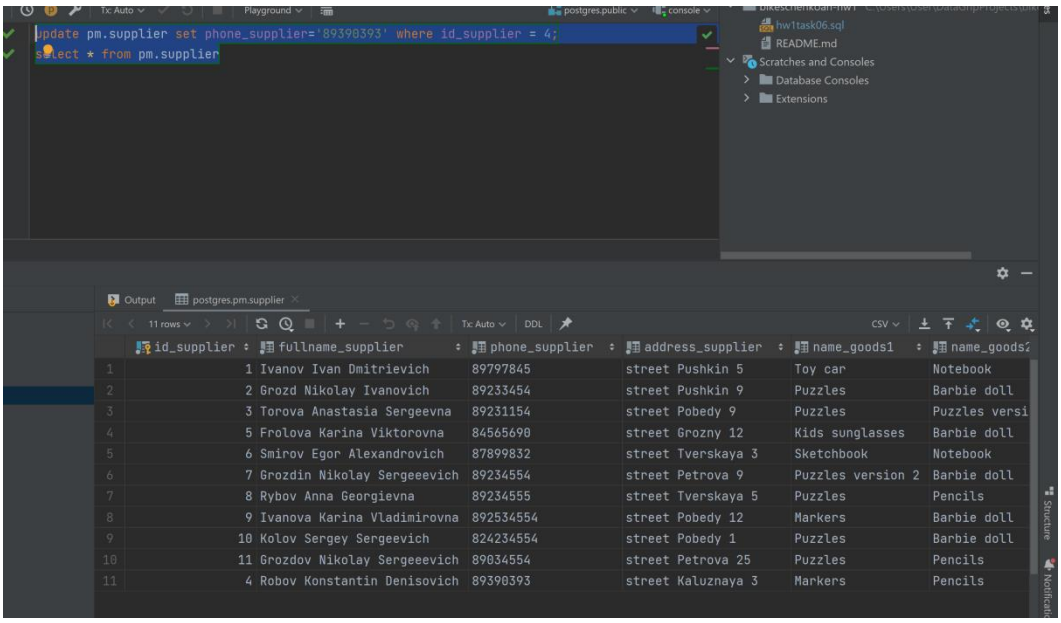
Output | postgres.pm.goods_stock

11 rows | Tx: Auto | DDL | CSV

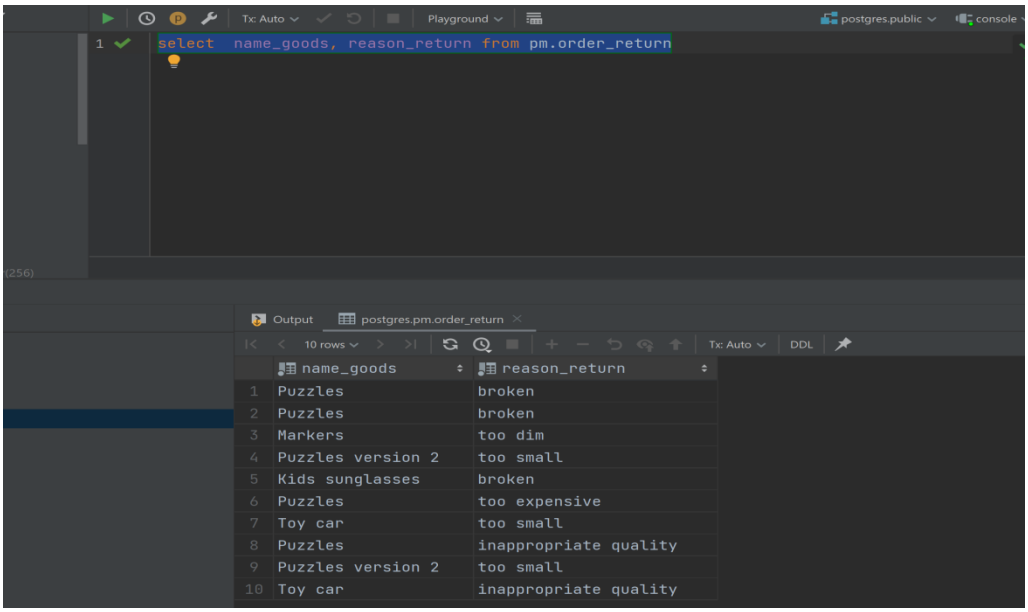
	id_goods	id_supplier	name_goods	desc_goods	cost_goods
1	1	1	Barbie doll	toy girl	1
2	2	1	Toy car	toy for boys	700
3	3	2	Barbie doll	toy for girl	1000
4	4	3	Puzzles	development for children and adults	500
5	5	3	Puzzles version 2	development for adults	800
6	6	4	Markers	designed for drawing	300
7	7	4	Pencils	designed for drawing	250
8	8	5	Kids sunglasses	designed for children	1500
9	9	6	Sketchbook	designed for drawing	230
10	10	6	Notebook	designed for drawing	210
11	11	1	Ken doll	toy for girl	1200



```
update pm.supplier set phone_supplier='89390393' where id_supplier = 4;
select * from pm.supplier
```

Output — postgres.pm.supplier — 11 rows

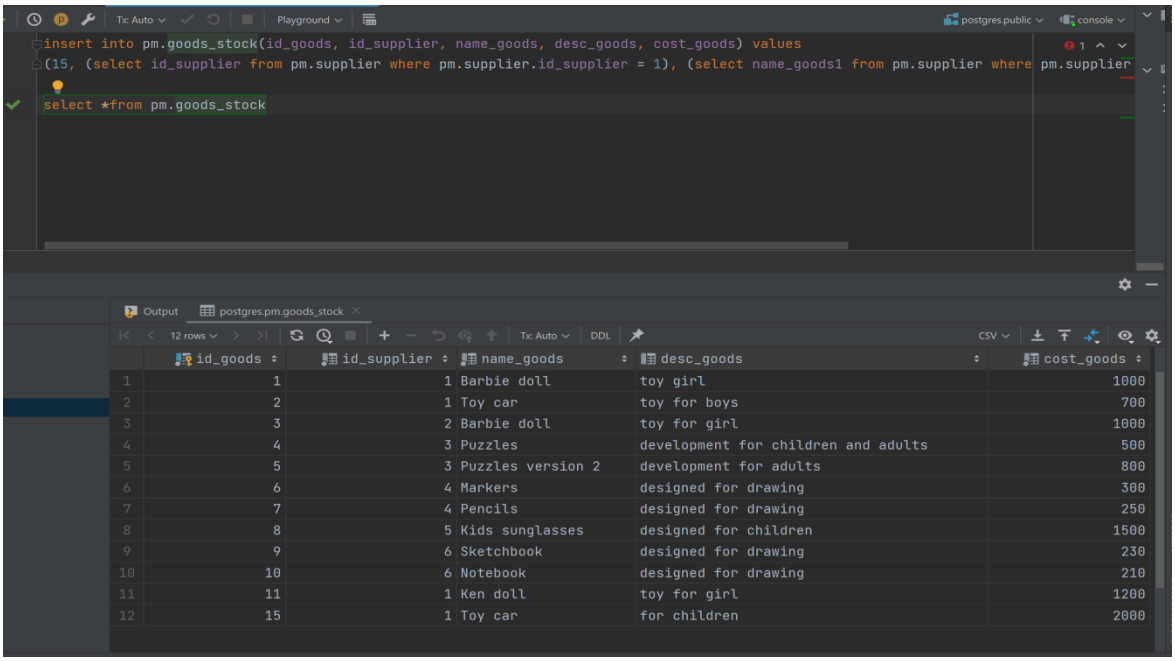
id_supplier	fullname_supplier	phone_supplier	address_supplier	name_goods1	name_goods2
1	Ivanov Ivan Dmitrievich	89797845	street Pushkin 5	Toy car	Notebook
2	Grozd Nikolay Ivanovich	89233454	street Pushkin 9	Puzzles	Barbie doll
3	Torova Anastasia Sergeevna	89231154	street Pobedy 9	Puzzles	Puzzles versi
5	Frolova Karina Viktorovna	84565698	street Grozny 12	Kids sunglasses	Barbie doll
6	Smirov Egor Alexandrovich	87899832	street Tverskaya 3	Sketchbook	Notebook
7	Grozdin Nikolay Sergeeevich	89234554	street Petrova 9	Puzzles version 2	Barbie doll
8	Rybov Anna Georgievna	89234555	street Tverskaya 5	Puzzles	Pencils
9	Ivanova Karina Vladimirovna	892534554	street Pobedy 12	Markers	Barbie doll
10	Kolov Sergey Sergeevich	824234554	street Pobedy 1	Puzzles	Barbie doll
11	Grozdov Nikolay Sergeeevich	89034554	street Petrova 25	Puzzles	Pencils
4	Robov Konstantin Denisovich	89390393	street Kaluznaya 3	Markers	Pencils



```
select  name_goods, reason_return from pm.order_return
```

Output — postgres.pm.order_return — 10 rows

name_goods	reason_return
Puzzles	broken
Puzzles	broken
Markers	too dim
Puzzles version 2	too small
Kids sunglasses	broken
Puzzles	too expensive
Toy car	too small
Puzzles	inappropriate quality
Puzzles version 2	too small
Toy car	inappropriate quality



```
insert into pm.goods_stock(id_goods, id_supplier, name_goods, desc_goods, cost_goods) values
(15, (select id_supplier from pm.supplier where pm.supplier.id_supplier = 1), (select name_goods1 from pm.supplier where pm.supplier
select *from pm.goods_stock
```

Output — postgres.pm.goods_stock — 12 rows

id_goods	id_supplier	name_goods	desc_goods	cost_goods
1	1	Barbie doll	toy girl	1000
2	1	Toy car	toy for boys	700
3	2	Barbie doll	toy for girl	1000
4	3	Puzzles	development for children and adults	500
5	3	Puzzles version 2	development for adults	800
6	4	Markers	designed for drawing	300
7	4	Pencils	designed for drawing	250
8	5	Kids sunglasses	designed for children	1500
9	6	Sketchbook	designed for drawing	230
10	6	Notebook	designed for drawing	210
11	1	Ken doll	toy for girl	1200
15	1	Toy car	for children	2000

6)Написать 6 запросов(group by, order by…).

select id_client, amount_gclient from pm.client pm

group by amount_gclient , id_client having amount_gclient > 60

select * from pm.orders_archive order by pm.orders_archive.time_order DESC

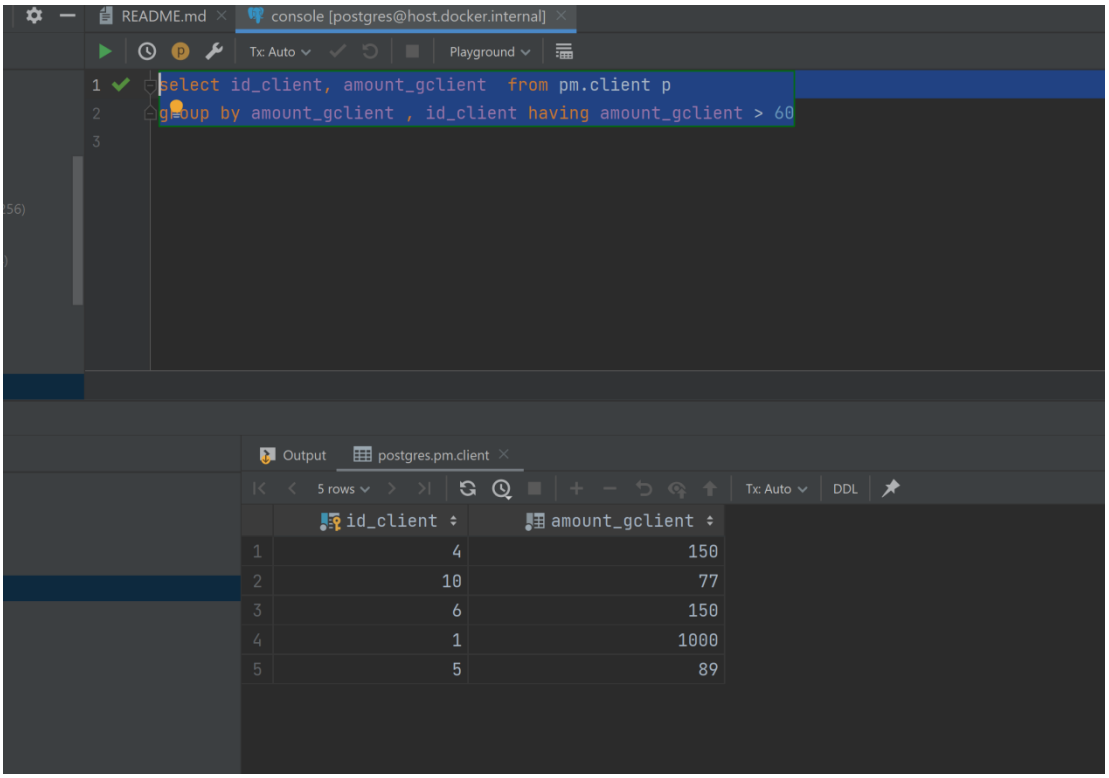
select id_order, (select name_goods from pm.goods_stock where id_goods = 3) , row_number() over() as row_number

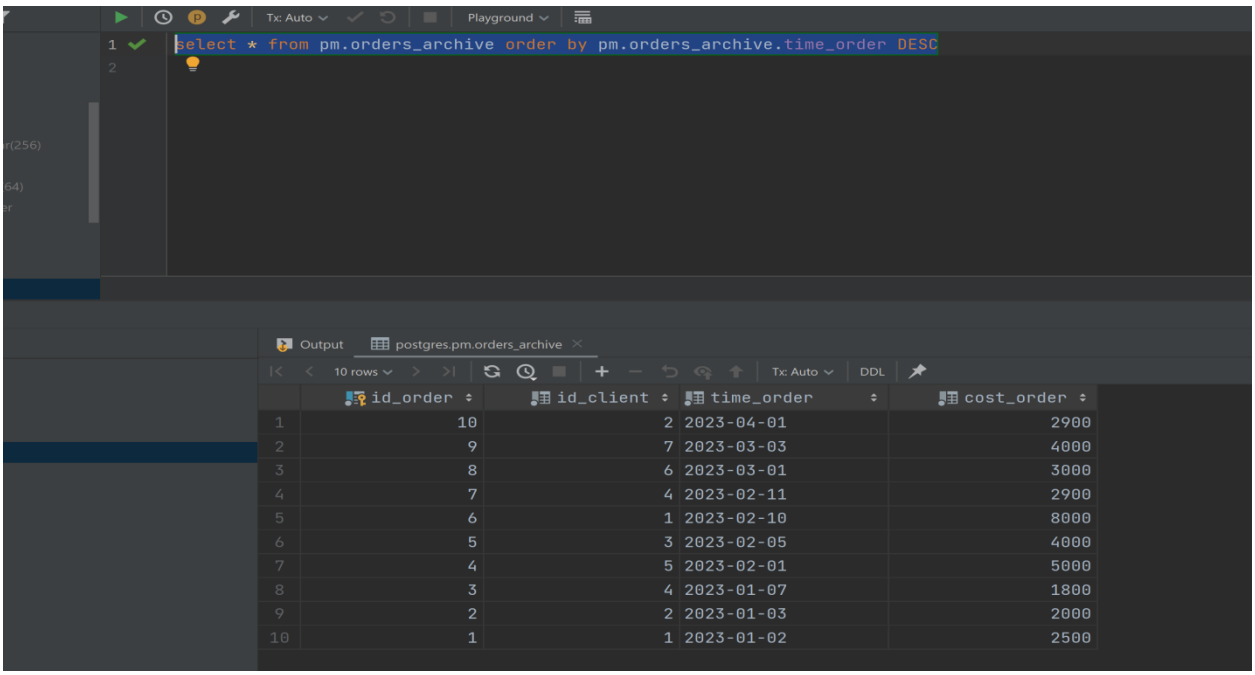
from pm.goods_order order by row_number ASC

select id_client, fullname_client , lag(id_client) over (partition by gender_client order by datage_client) as older_client from pm.client

select id_client, fullname_client , lead(id_client) over (partition by gender_client order by datage_client) as younger_client from pm.client

Скриншоты:



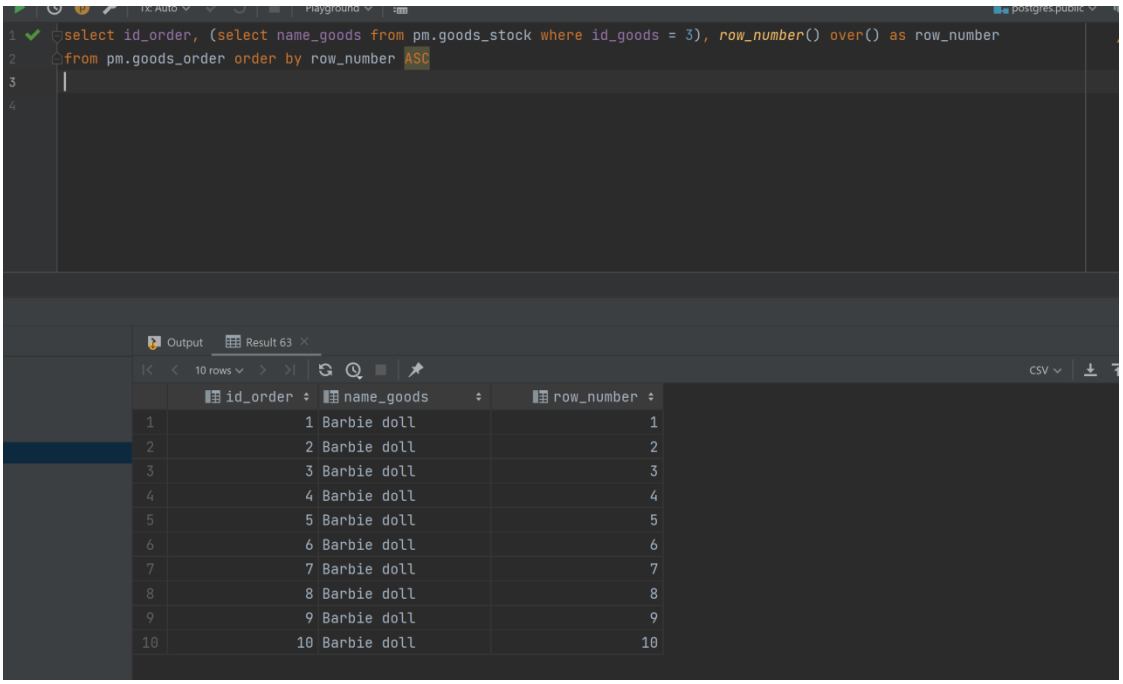


```
select * from pm.orders_archive order by pm.orders_archive.time_order DESC
```

Output | postgres.pm.orders_archive

10 rows

	id_order	id_client	time_order	cost_order
1	10	2	2023-04-01	2900
2	9	7	2023-03-03	4000
3	8	6	2023-03-01	3000
4	7	4	2023-02-11	2900
5	6	1	2023-02-10	8000
6	5	3	2023-02-05	4000
7	4	5	2023-02-01	5000
8	3	4	2023-01-07	1800
9	2	2	2023-01-03	2000
10	1	1	2023-01-02	2500

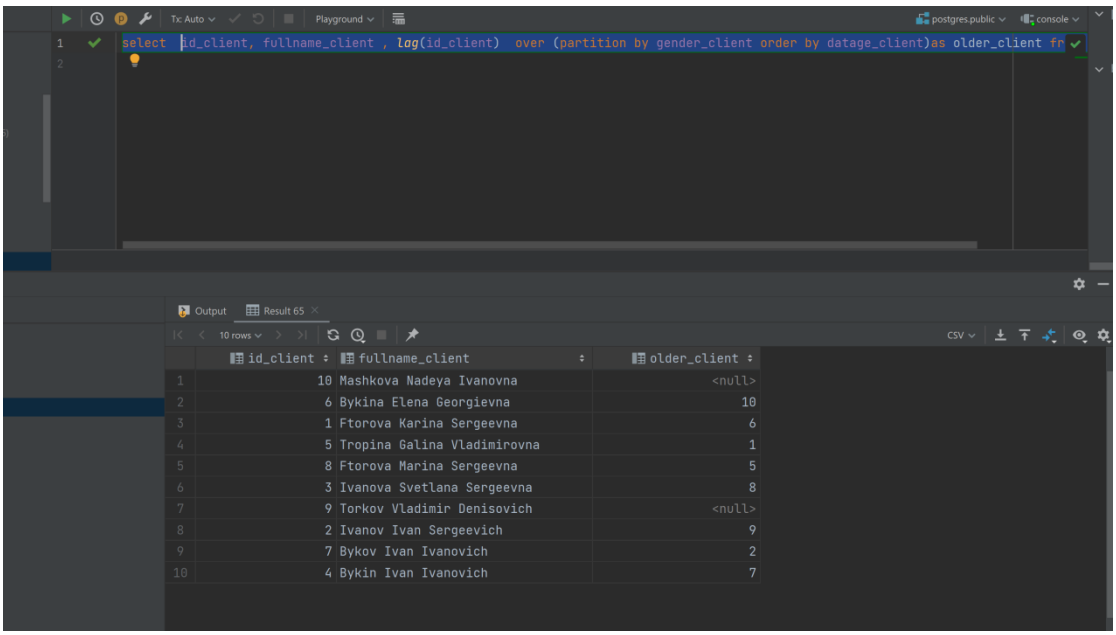


```
select id_order, (select name_goods from pm.goods_stock where id_goods = 3), row_number() over() as row_number
from pm.goods_order order by row_number ASC
```

Output | Result 63

10 rows

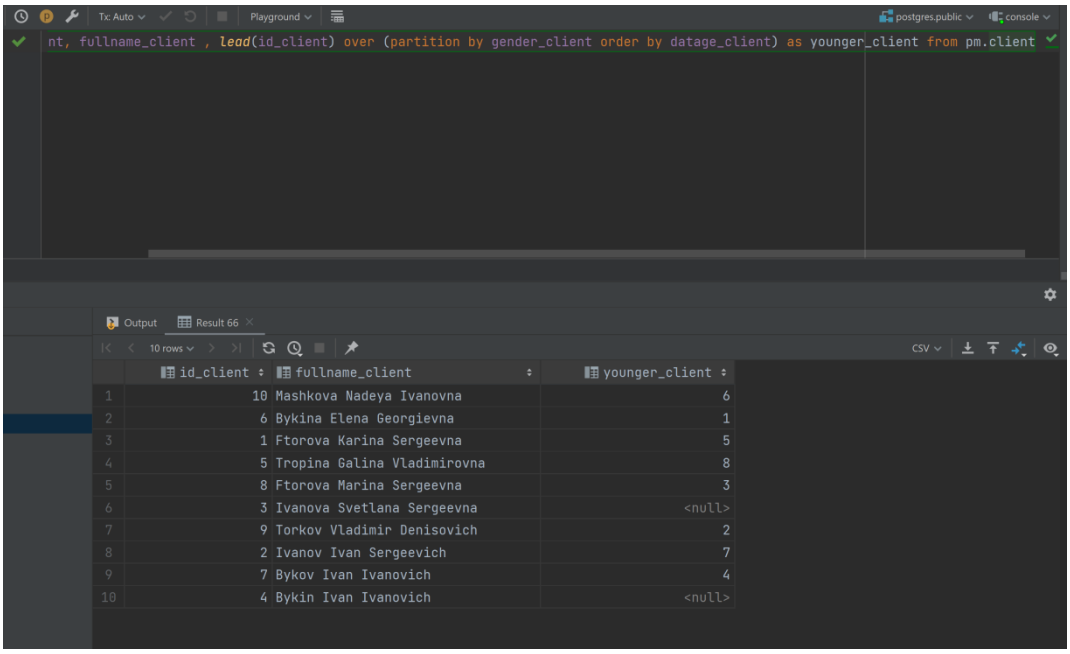
	id_order	name_goods	row_number
1	1	Barbie doll	1
2	2	Barbie doll	2
3	3	Barbie doll	3
4	4	Barbie doll	4
5	5	Barbie doll	5
6	6	Barbie doll	6
7	7	Barbie doll	7
8	8	Barbie doll	8
9	9	Barbie doll	9
10	10	Barbie doll	10



```
select  id_client, fullname_client , lag(id_client)  over (partition by gender_client order by datage_client)as older_client fr
```

Output | Result 65 | 10 rows | CSV

	id_client	fullname_client	older_client
1	10	Mashkova Nadeya Ivanovna	<null>
2	6	Bykina Elena Georgievna	10
3	1	Ftorova Karina Sergeevna	6
4	5	Tropina Galina Vladimirovna	1
5	8	Ftorova Marina Sergeevna	5
6	3	Ivanova Svetlana Sergeevna	8
7	9	Torkov Vladimir Denisovich	<null>
8	2	Ivanov Ivan Sergeevich	9
9	7	Bykov Ivan Ivanovich	2
10	4	Bykin Ivan Ivanovich	7



```
nt, fullname_client , lead(id_client) over (partition by gender_client order by datage_client) as younger_client from pm.client
```

Output | Result 66 | 10 rows | CSV

	id_client	fullname_client	younger_client
1	10	Mashkova Nadeya Ivanovna	6
2	6	Bykina Elena Georgievna	1
3	1	Ftorova Karina Sergeevna	5
4	5	Tropina Galina Vladimirovna	8
5	8	Ftorova Marina Sergeevna	3
6	3	Ivanova Svetlana Sergeevna	<null>
7	9	Torkov Vladimir Denisovich	2
8	2	Ivanov Ivan Sergeevich	7
9	7	Bykov Ivan Ivanovich	4
10	4	Bykin Ivan Ivanovich	<null>