### Министерство образования Республики Беларусь

Учреждение образования «Белорусский государственный университет информатики и радиоэлектроники»

Кафедра экономической информатики

Лабораторная работа №3 ЯЗЫК SQL. СОЗДАНИЕ ТАБЛИЦ И ОГРАНИЧЕНИЙ НА SQL

Выполнил: студент гр.

914302 Мирошник А.А.

Проверил: Лукашевич А.Э.

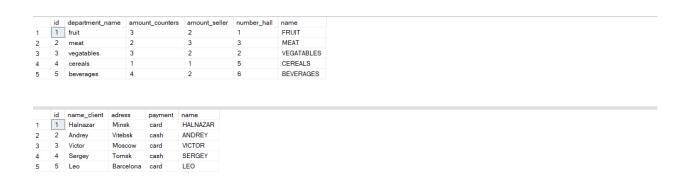
#### Цель работы

Изучение структурированного языка запросов Transact - SQL, являющегося основой системы программирования SQL Server, и приобретение навыков применение инструментальных средств разработки и программирования объектов создаваемых баз данных. Изучить SQL-операторы для работы с таблицами и индексами. Изучить sql- команды для создания, изменения и удаления таблиц. Изучить используемые в SQL Server типы ограничений. Изучить SQL-операторы для работы с ограничениями.

SELECT COUNT(\*) as count FROM product WHERE storage\_conditions='cold'
SELECT COUNT(DISTINCT type\_payment) as count FROM supplier

1	count 3
	count
1	2
SI	ELECT SUM(summ) as sum FROM product_sale
	ELECT SUM(summ) as sum FROM product_sale ELECT SUM(summ) as sum FROM product_sale WHERE id<3
	•
	ELECT SUM(summ) as sum FROM product_sale WHERE id<3

SELECT \*, UPPER(department\_name) as name FROM department SELECT \*, UPPER(name\_client) as name FROM client



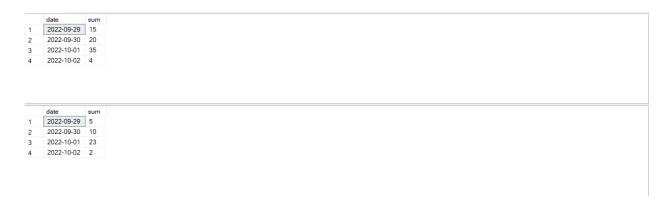
# SELECT \*, LOWER(department\_name) as name FROM department SELECT \*, LOWER(name\_client) as name FROM client



## SELECT \*, MONTH(time) as month FROM product\_sale SELECT \*, YEAR(time) as year FROM product\_sale

	id	date	time	amount	prime	summ	product_id	month
1	1	2022-10-01	2022-10-03 17:00:00.000	3	5	15	3	10
2	2	2022-10-02	2022-10-03 18:00:00.000	2	2	4	1	10
3	3	2022-09-30	2022-10-03 14:00:00.000	10	2	20	2	10
4	4	2022-10-01	2022-10-03 13:00:00.000	20	1	20	5	10
5	5	2022-09-29	2022-10-03 12:00:00.000	5	3	15	4	10
	id	date	time	amount	prime	summ	product_id	year
1	id 1	date 2022-10-01	time 2022-10-03 17:00:00.000	amount	prime 5	summ	product_id	year 2022
1 2			2022-10-03 17:00:00.000	3			-	
1 2 3	1	2022-10-01	2022-10-03 17:00:00.000 2022-10-03 18:00:00.000	3	5	15	-	2022
-	2	2022-10-01 2022-10-02	2022-10-03 17:00:00.000 2022-10-03 18:00:00.000	3 2	5	15 4	3	2022 2022

SELECT date, SUM(summ) as sum FROM product\_sale GROUP BY date SELECT date, SUM(amount) as sum FROM product\_sale GROUP BY date



SELECT COUNT(\*) from department HAVING COUNT(\*) > 3; SELECT COUNT(\*) from client HAVING COUNT(\*) > 3;

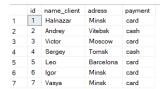


SELECT \* FROM department WHERE id>0 ORDER BY amount\_counters SELECT \* FROM department WHERE id>0 ORDER BY amount\_seller



INSERT INTO client(name\_client, adress, payment) VALUES ('Igor', 'Minsk', 'card')

INSERT INTO client(name\_client, adress, payment) VALUES ('Vasya', 'Minsk', 'card')



# UPDATE client SET adress='Barcelona' WHERE id=1

### UPDATE client SET adress='Asgabat' WHERE id=4

	id	name_client	adress	payment
1	1	Halnazar	Barcelona	card
2	2	Andrey	Vitebsk	cash
3	3	Victor	Moscow	card
4	4	Sergey	Asgabat	cash
5	5	Leo	Barcelona	card
6	6	Igor	Minsk	card
7	7	Vasya	Minsk	card

### DELETE FROM client WHERE id=2

### DELETE FROM client WHERE id=3

	id	name_client	adress	payment
1	1	Halnazar	Barcelona	card
2	2	Andrey	Vitebsk	cash
3	3	Victor	Moscow	card
4	4	Sergey	Asgabat	cash
5	5	Leo	Barcelona	card