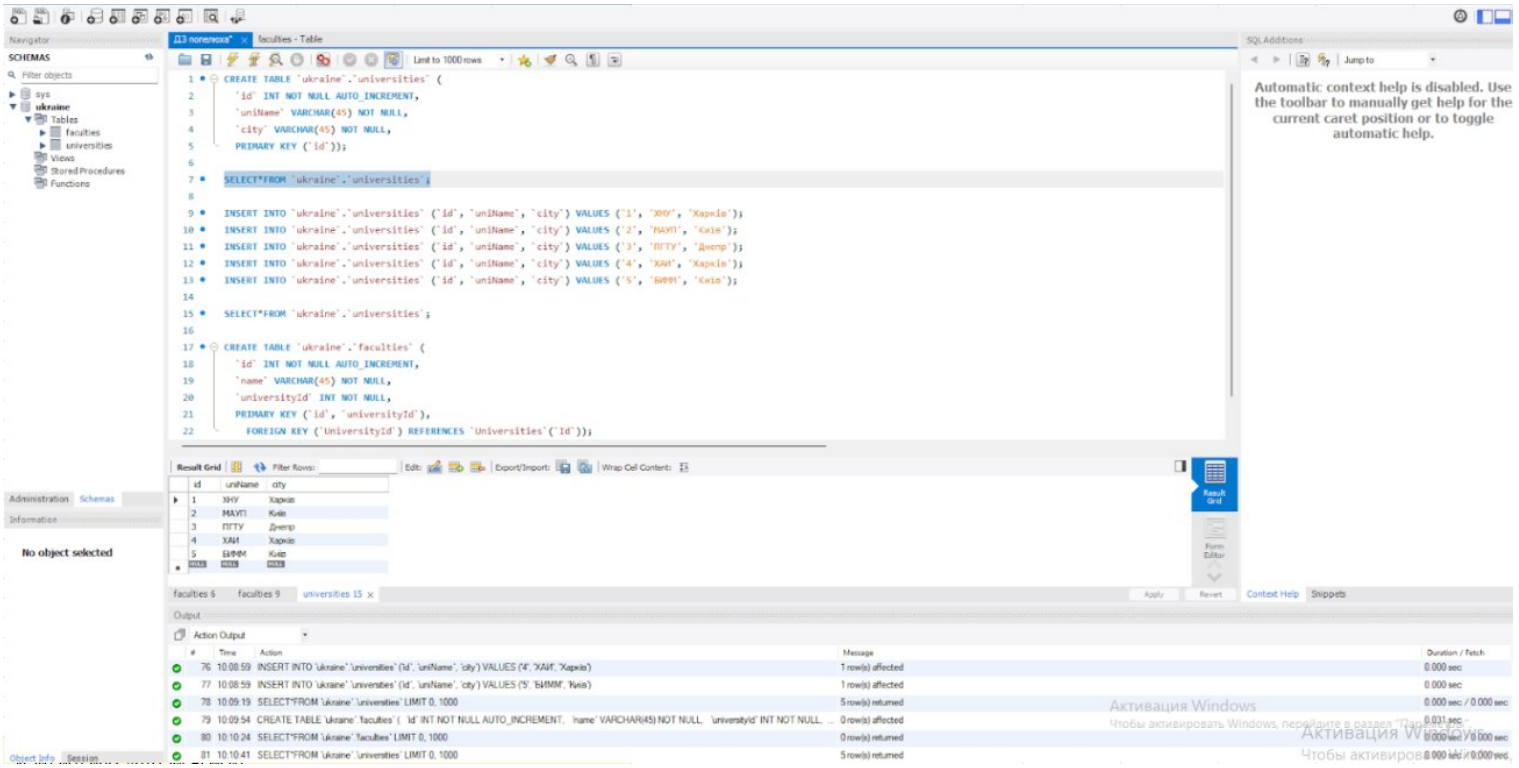
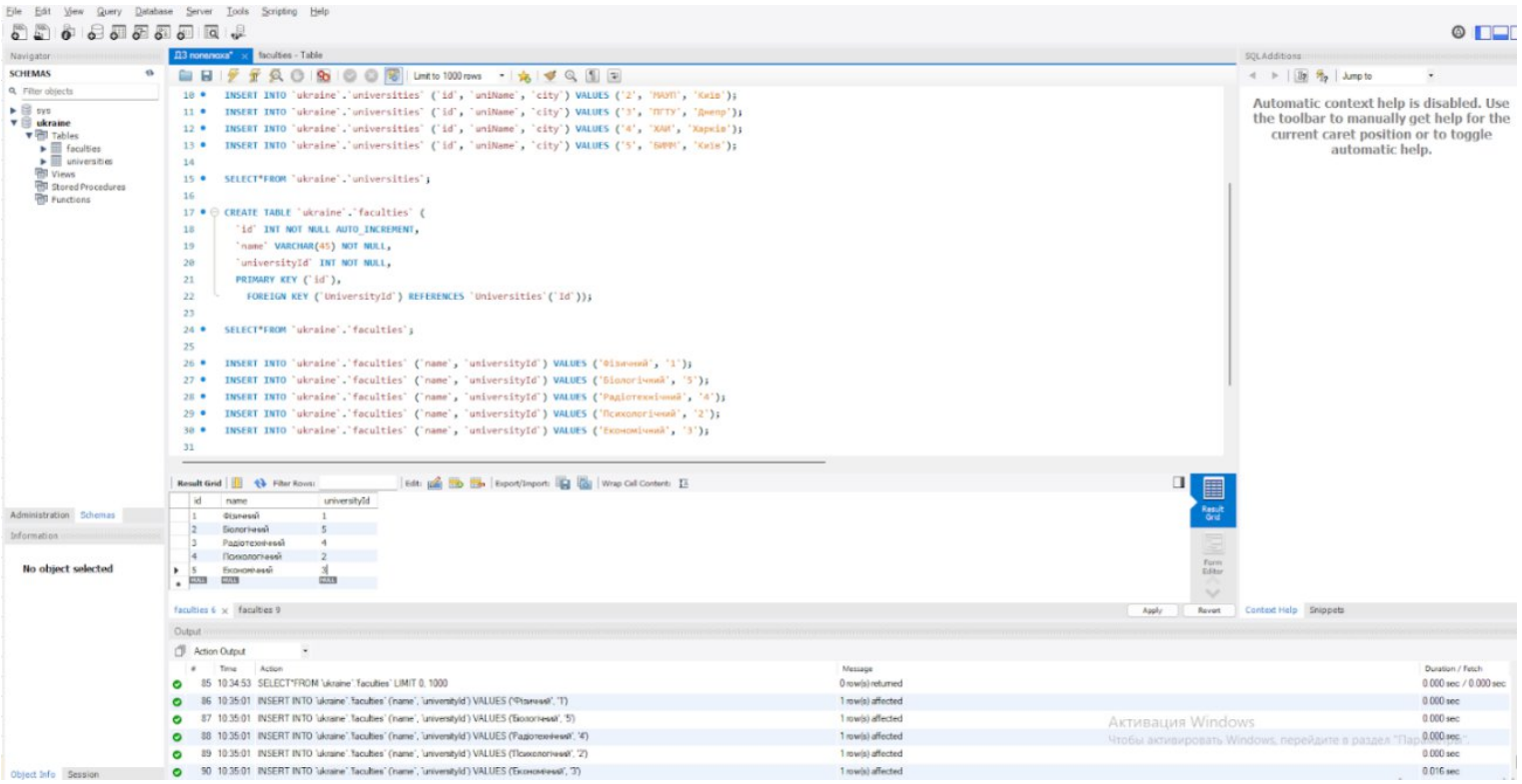
Coach's task:	**29. In the databases, create tables, relationships between them and fill them with data. Requirements:** **a) Universities table with columns Id, UniName, City. One or more universities in the name must contain the letter U (LNU, CHNU)** **b) Faculties table with columns Id, Name, UniversityId (tied with a foreign key to the Universities table).** **c) Groups table with branches Id, GroupNumber, FacultyId (tied with a foreign key to the Faculties table). When filling in, keep in mind that group numbers depend on the course. The first digit of the group always indicates the course (1 course = 102, 103, etc. group). Create one or two groups for each (1-5) course.** **d) Students table with columns Id, Name, Surname, Age, GroupId (tied with a foreign key to the Groups table). When filling in, create one student with the name Ivan.** **e) Provide the result as a screenshot (from here on)**	Feedback from the coach:	29 ти чудово впоралась, молодець) 18:38 30 також все правильно, молодець) 18:39 чекаю наступну таску 18:40

ID	Attatchments
a	CREATE TABLE `ukraine`.`universities` (`id` INT NOT NULL AUTO_INCREMENT, `uniName` VARCHAR(45) NOT NULL, `city` VARCHAR(45) NOT NULL, PRIMARY KEY (`id`)); INSERT INTO `ukraine`.`universities` (`id`, `uniName`, `city`) VALUES ('1', 'ХНУ', 'Харків'); INSERT INTO `ukraine`.`universities` (`id`, `uniName`, `city`) VALUES ('2', 'МАУП', 'Київ'); INSERT INTO `ukraine`.`universities` (`id`, `uniName`, `city`) VALUES ('3', 'ПГТУ', 'Дніпр'); INSERT INTO `ukraine`.`universities` (`id`, `uniName`, `city`) VALUES ('4', 'ХАИ', 'Харків'); INSERT INTO `ukraine`.`universities` (`id`, `uniName`, `city`) VALUES ('5', 'БИММ', 'Київ'); SELECT*FROM `ukraine`.`universities`;



b	CREATE TABLE `ukraine`.`faculties` (`id` INT NOT NULL AUTO_INCREMENT, `name` VARCHAR(45) NOT NULL, `universityId` INT NOT NULL, PRIMARY KEY (`id`), FOREIGN KEY (`UniversityId`) REFERENCES `Universities`(`Id`)); INSERT INTO `ukraine`.`faculties` (`name`, `universityId`) VALUES ('Фізичний', '1'); INSERT INTO `ukraine`.`faculties` (`name`, `universityId`) VALUES ('Біологічний', '5'); INSERT INTO `ukraine`.`faculties` (`name`, `universityId`) VALUES ('Радіотехнічний', '4'); INSERT INTO `ukraine`.`faculties` (`name`, `universityId`) VALUES ('Психологічний', '2'); INSERT INTO `ukraine`.`faculties` (`name`, `universityId`) VALUES ('Економічний', '3'); SELECT*FROM `ukraine`.`faculties`;

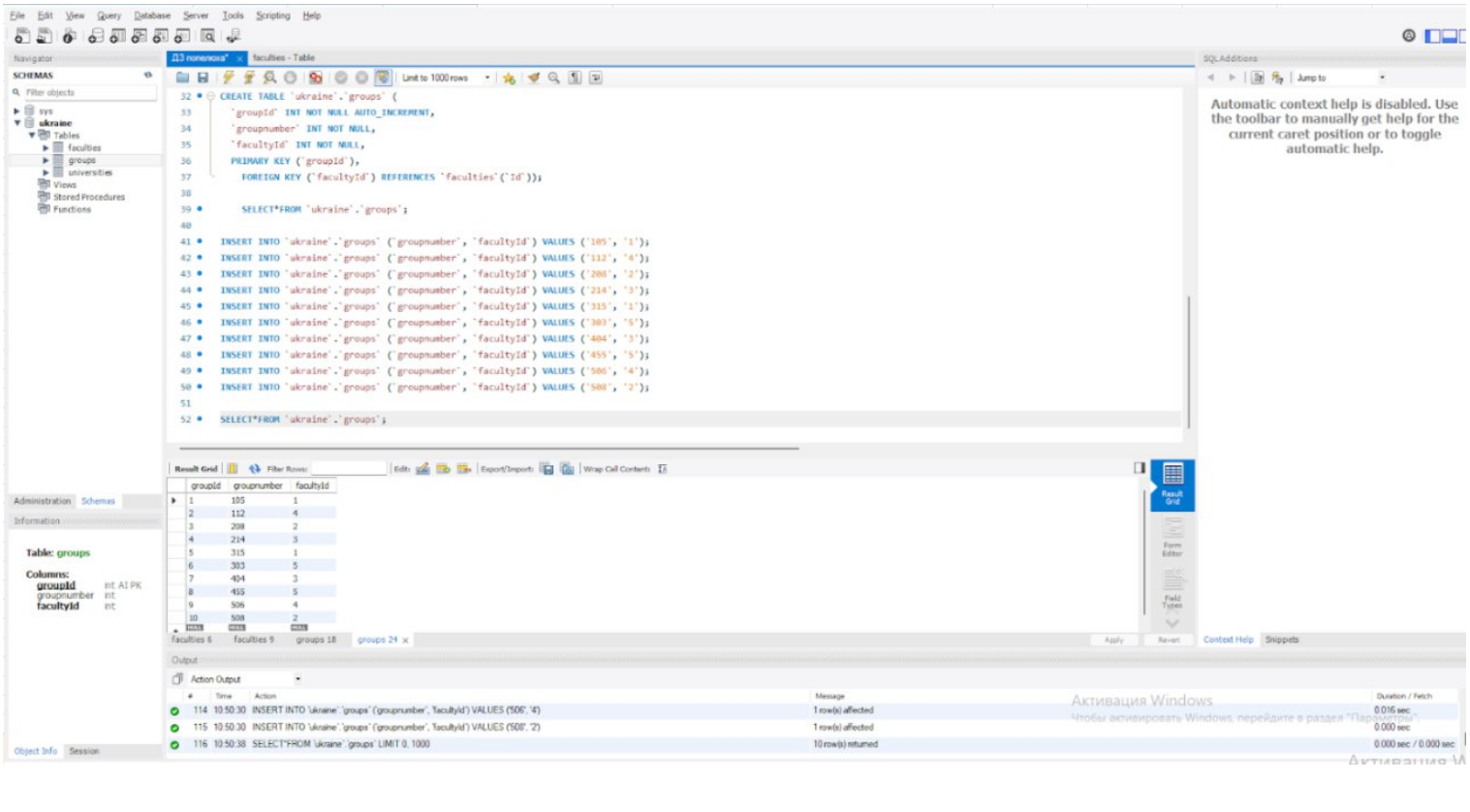


c

```
CREATE TABLE `ukraine`.`groups` (
  `groupId` INT NOT NULL AUTO_INCREMENT,
  `groupnumber` INT NOT NULL,
  `facultyId` INT NOT NULL,
  PRIMARY KEY (`groupId`),
    FOREIGN KEY (`facultyId`) REFERENCES `faculties`(`Id`));
```

```
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('105', '1');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('112', '4');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('208', '2');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('214', '3');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('315', '1');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('303', '5');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('404', '3');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('455', '5');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('506', '4');
INSERT INTO `ukraine`.`groups` (`groupnumber`, `facultyId`) VALUES ('508', '2');
```

```
SELECT*FROM `ukraine`.`groups`;
```

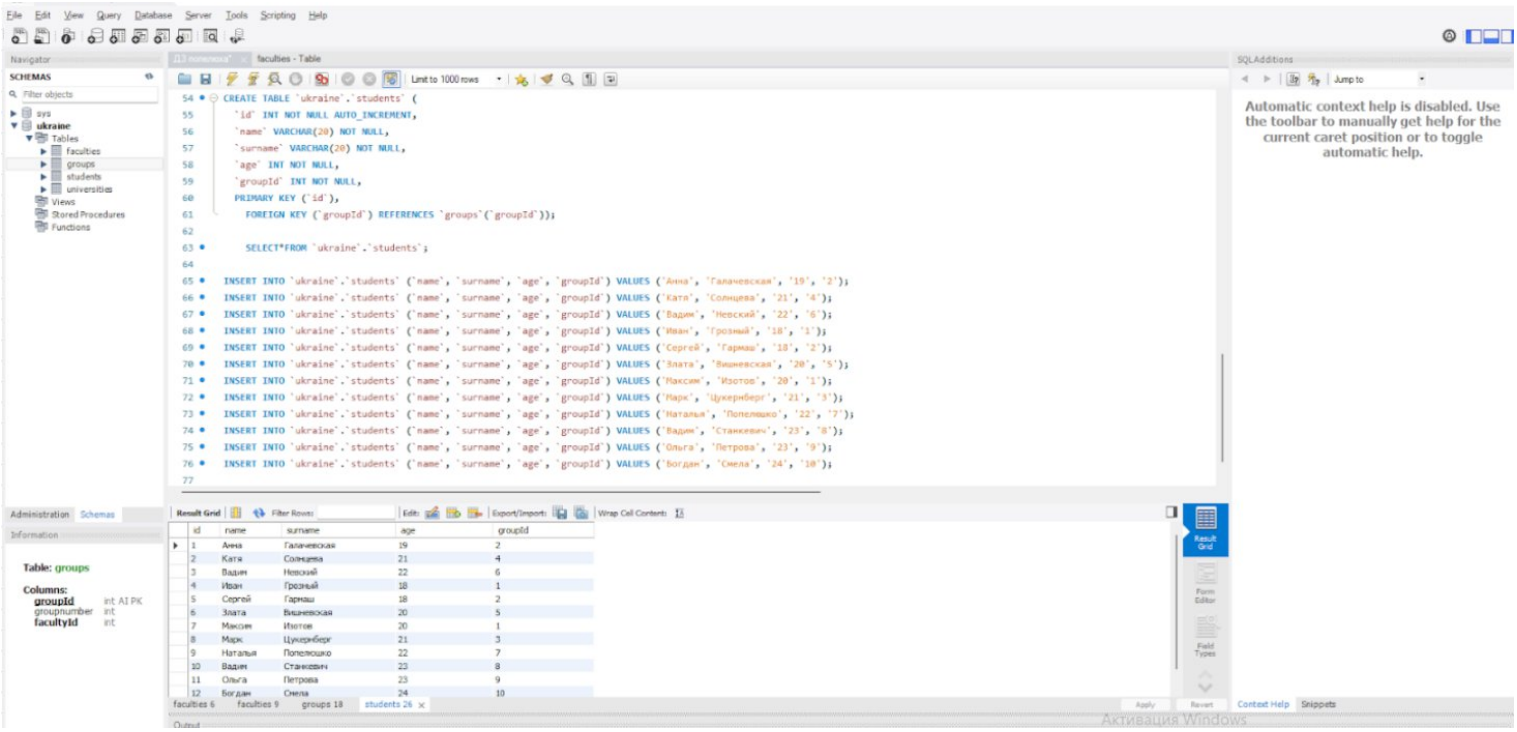


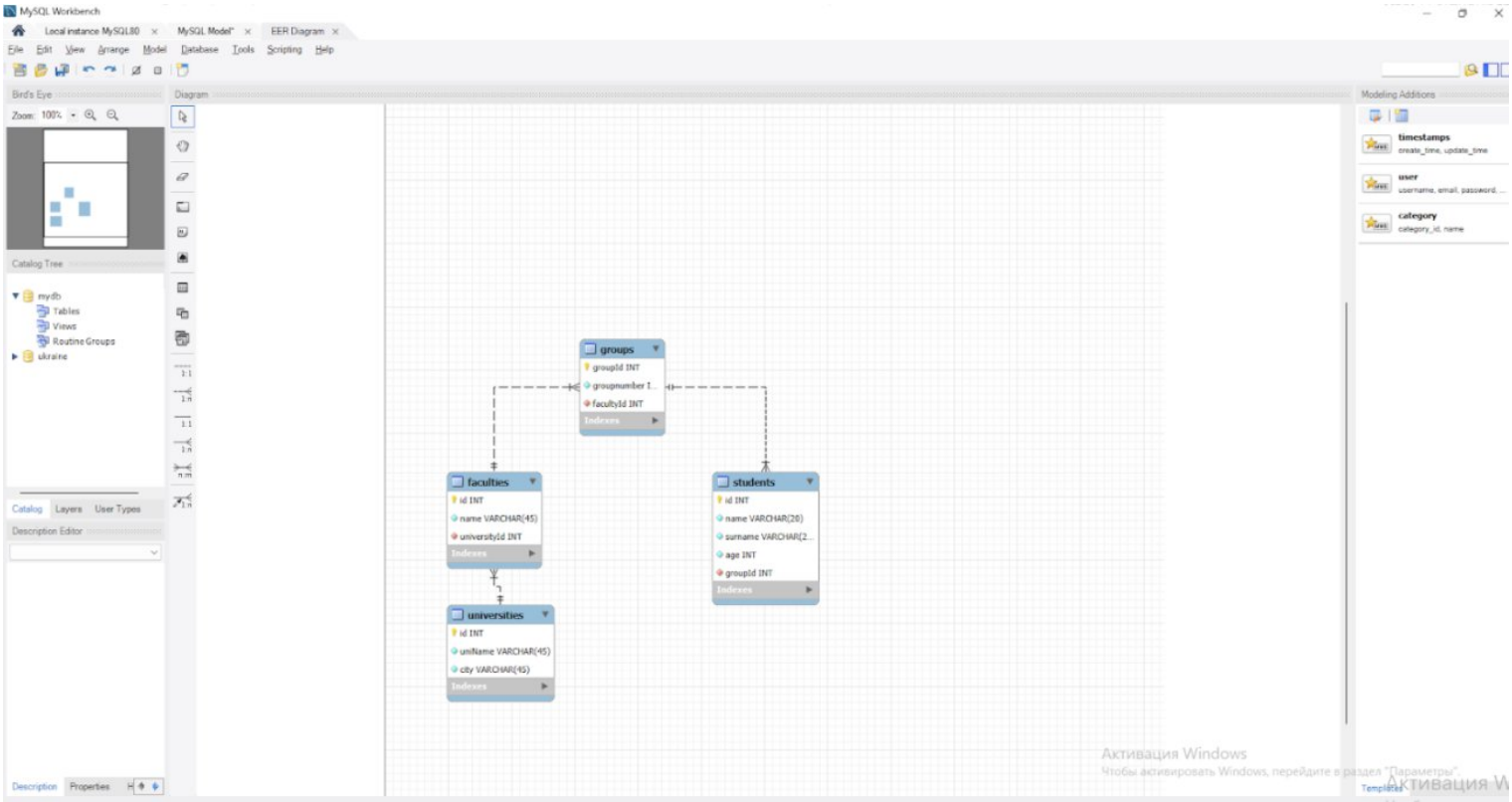
d

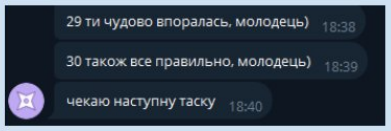
```
CREATE TABLE `ukraine`.`students` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `name` VARCHAR(20) NOT NULL,
  `surname` VARCHAR(20) NOT NULL,
  `age` INT NOT NULL,
  `groupId` INT NOT NULL,
  PRIMARY KEY (`id`),
    FOREIGN KEY (`groupId`) REFERENCES `groups`(`groupId`));
```

```
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Анна', 'Галачевская', '19', '2');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Катя', 'Солнцева', '21', '4');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Вадим', 'Невский', '22', '6');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Иван', 'Грозный', '18', '1');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Сергей', 'Гармаш', '18', '2');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Злата', 'Вишневская', '20', '5');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Максим', 'Изотов', '20', '1');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Марк', 'Цукернберг', '21', '3');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Наталья', 'Попелюшко', '22', '7');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Вадим', 'Станкевич', '23', '8');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Ольга', 'Петрова', '23', '9');
INSERT INTO `ukraine`.`students` (`name`, `surname`, `age`, `groupId`) VALUES ('Богдан', 'Смела', '24', '10');
```

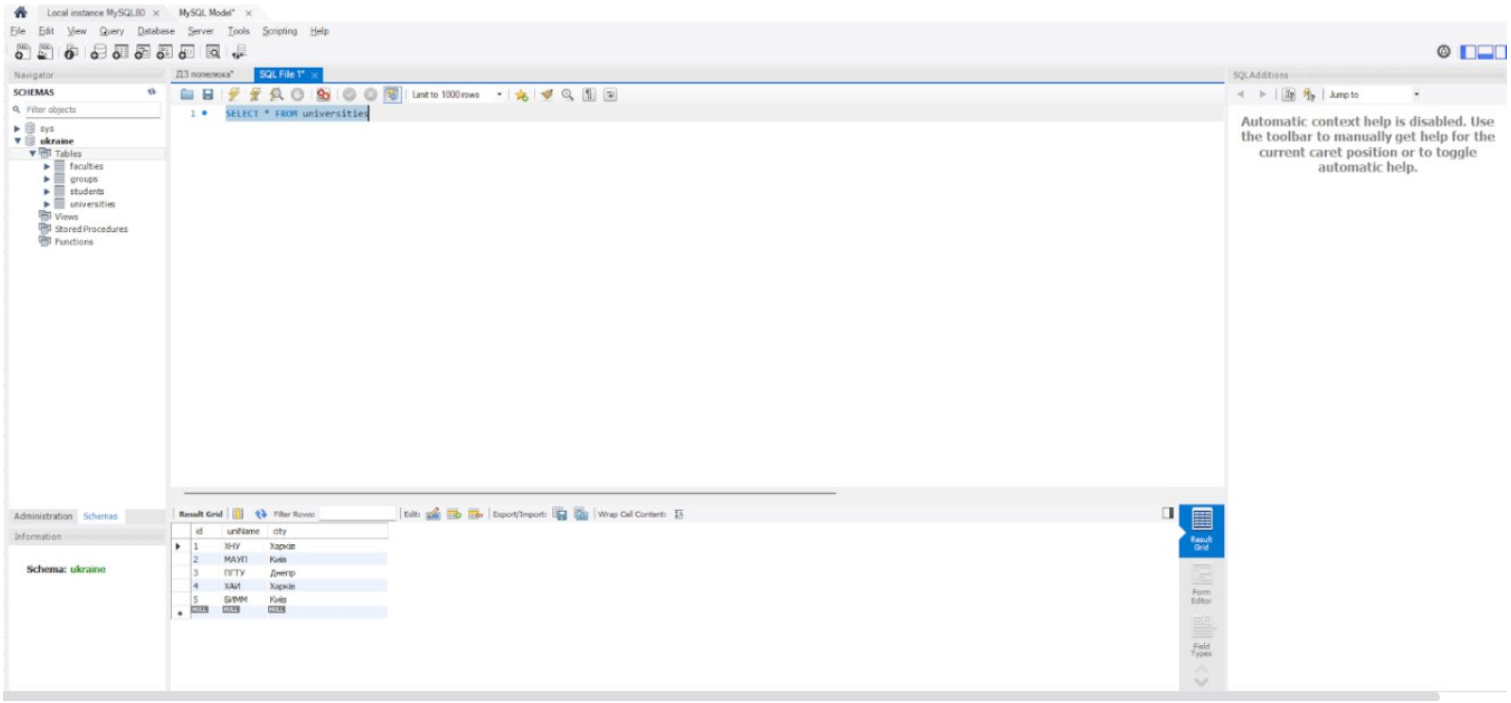
```
SELECT*FROM `ukraine`.`students`;
```



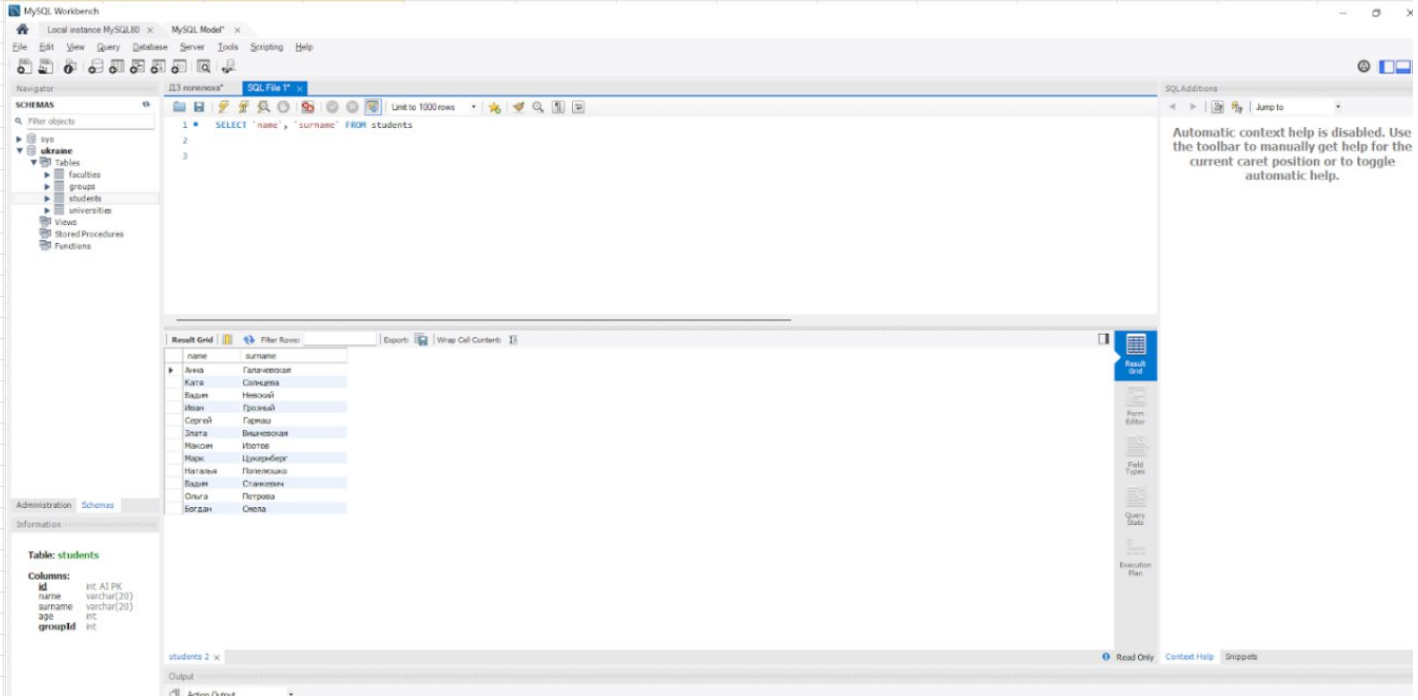


Coach's task:	30. Write selects on tables: (video) a) select all fields from universities, b) select only the first and last names of students, c) select only those students whose name is Ivan, d) select only those groups whose numbers are greater than 300, e) select only universities with the letter U in their name. Provide the result as a screenshot	Feedback from the coach:	

ID	Attatchments
a	**Select all fields from universities**
	SELECT * FROM universities

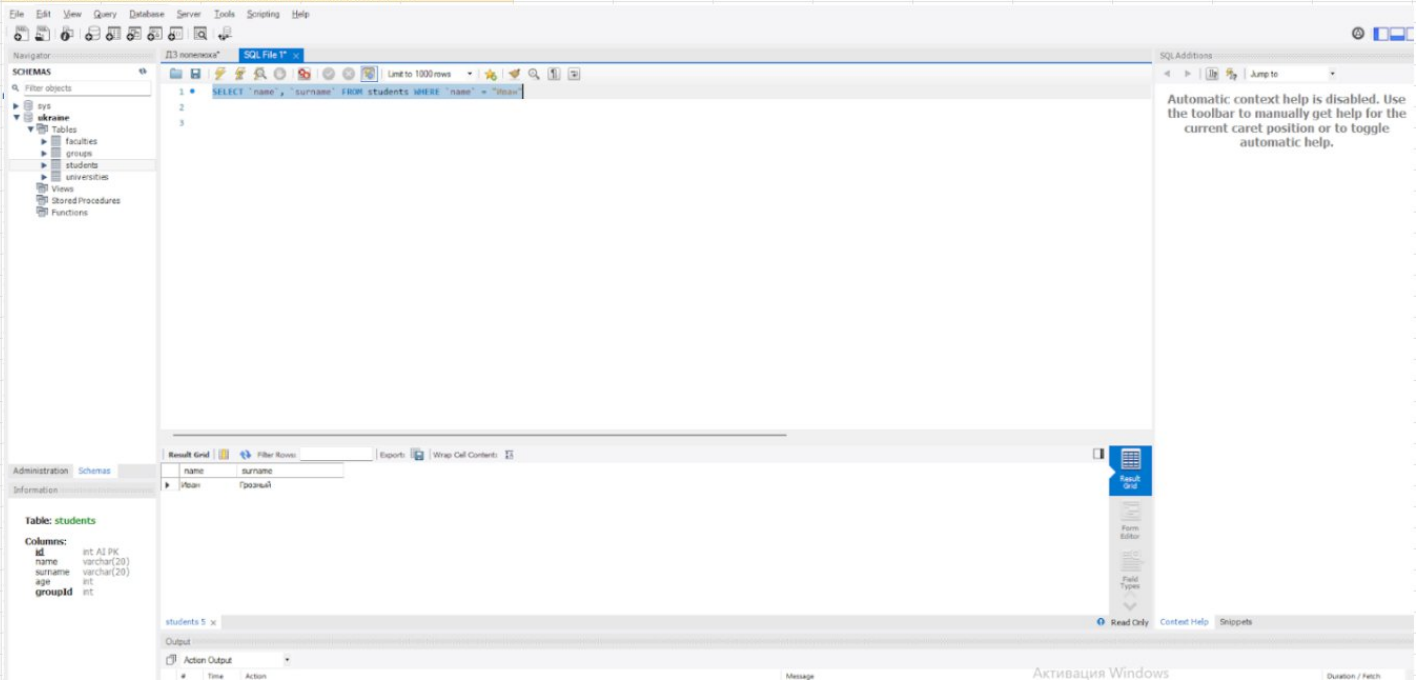


b	**Select only the first and last names of students**
	SELECT `name`, `surname` FROM students



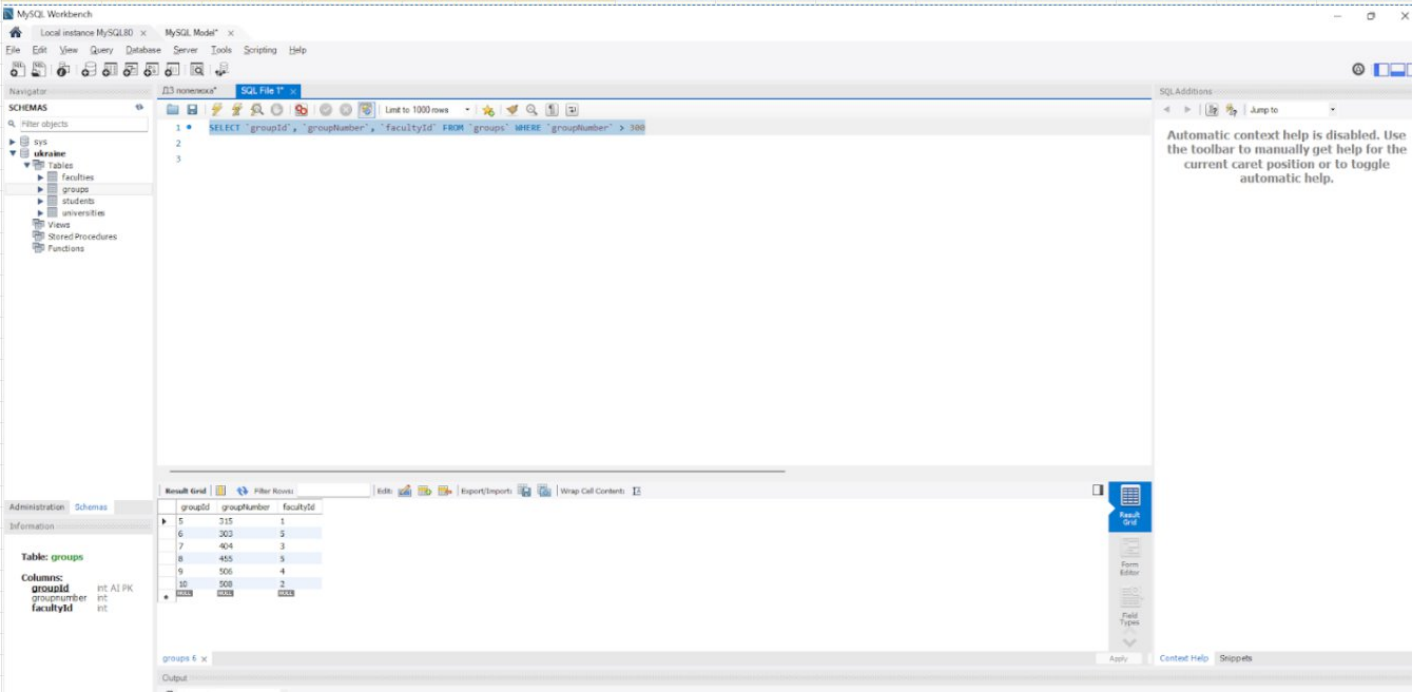
c **Select only those students whose name is Иван**

```
SELECT `name`, `surname` FROM students WHERE `name` = "Иван"
```



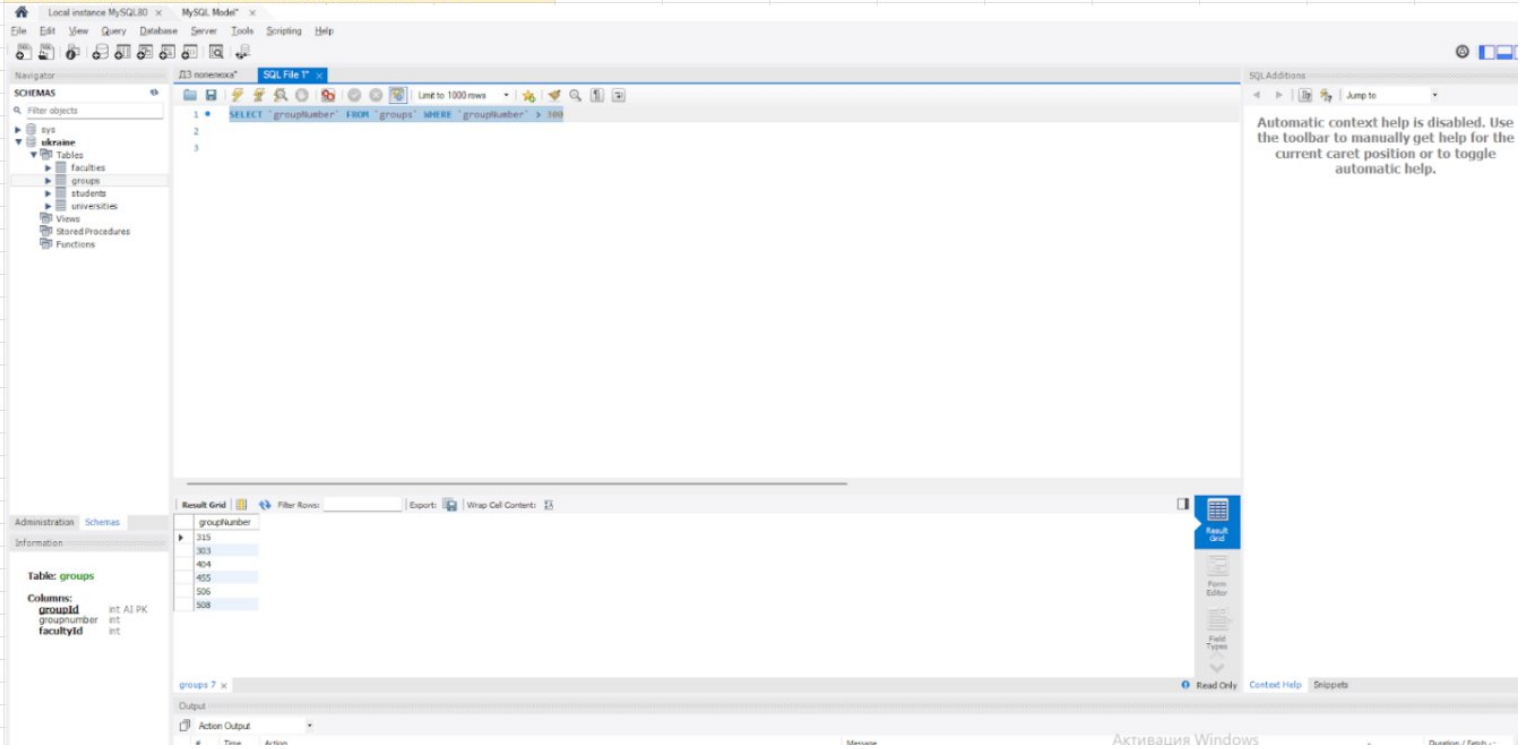
d **Select only those groups whose numbers are greater than 300**

```
SELECT `groupId`, `groupNumber`, `facultyId` FROM `groups` WHERE `groupNumber` > 300
```



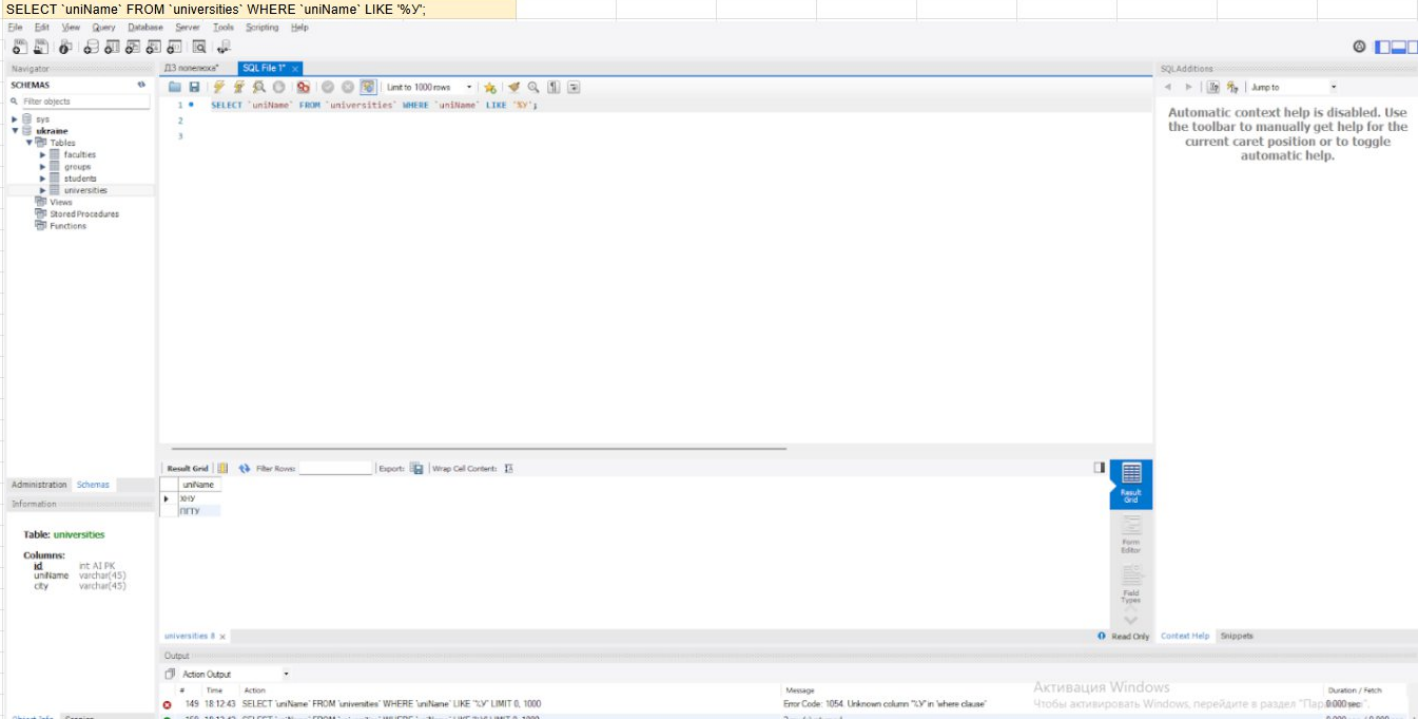
Or only group numbers that are greater

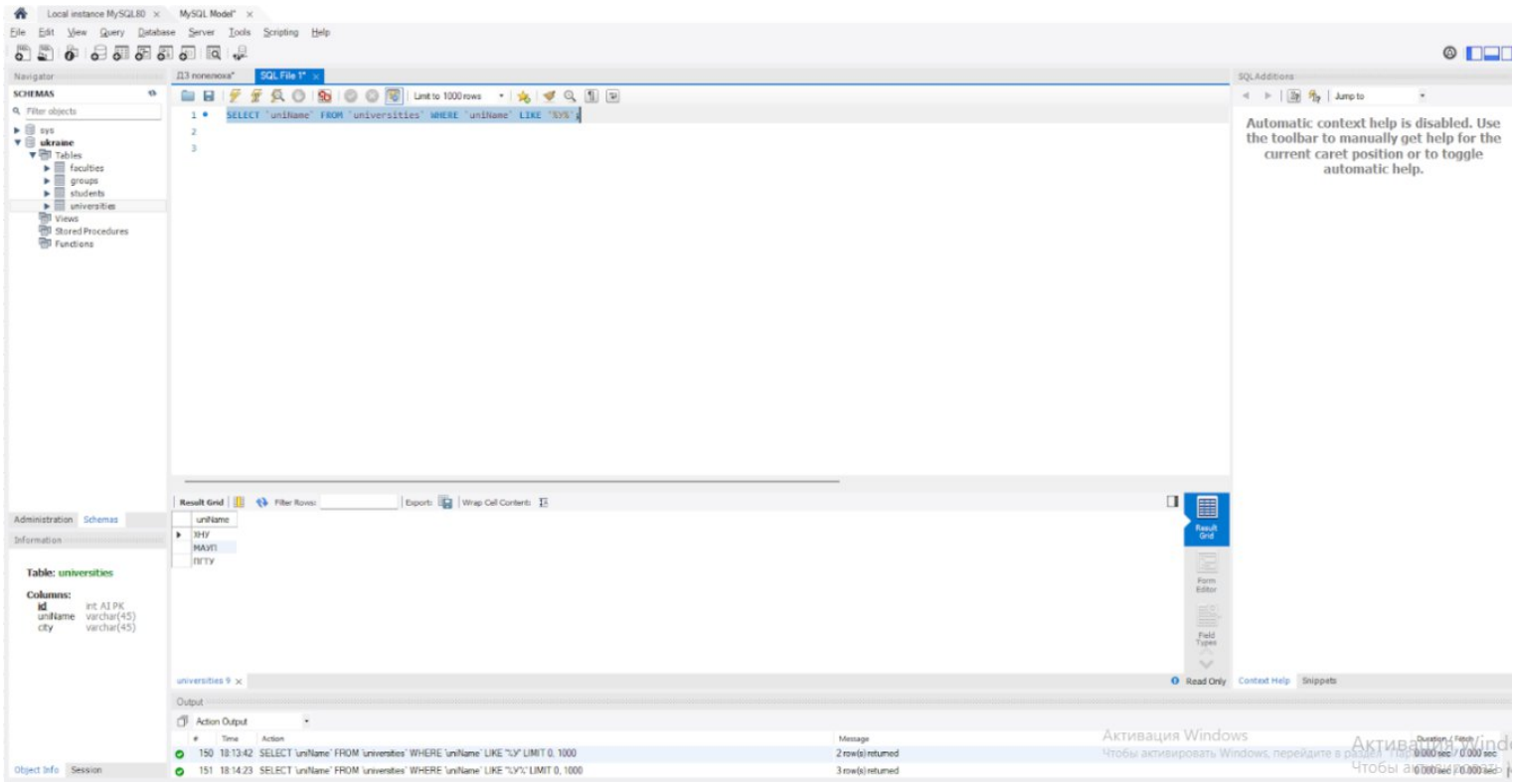
```
SELECT `groupNumber` FROM `groups` WHERE `groupNumber` > 300
```

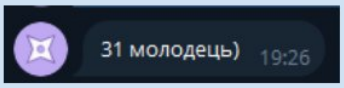


e **Select only those universities that contain the letter U in their name**

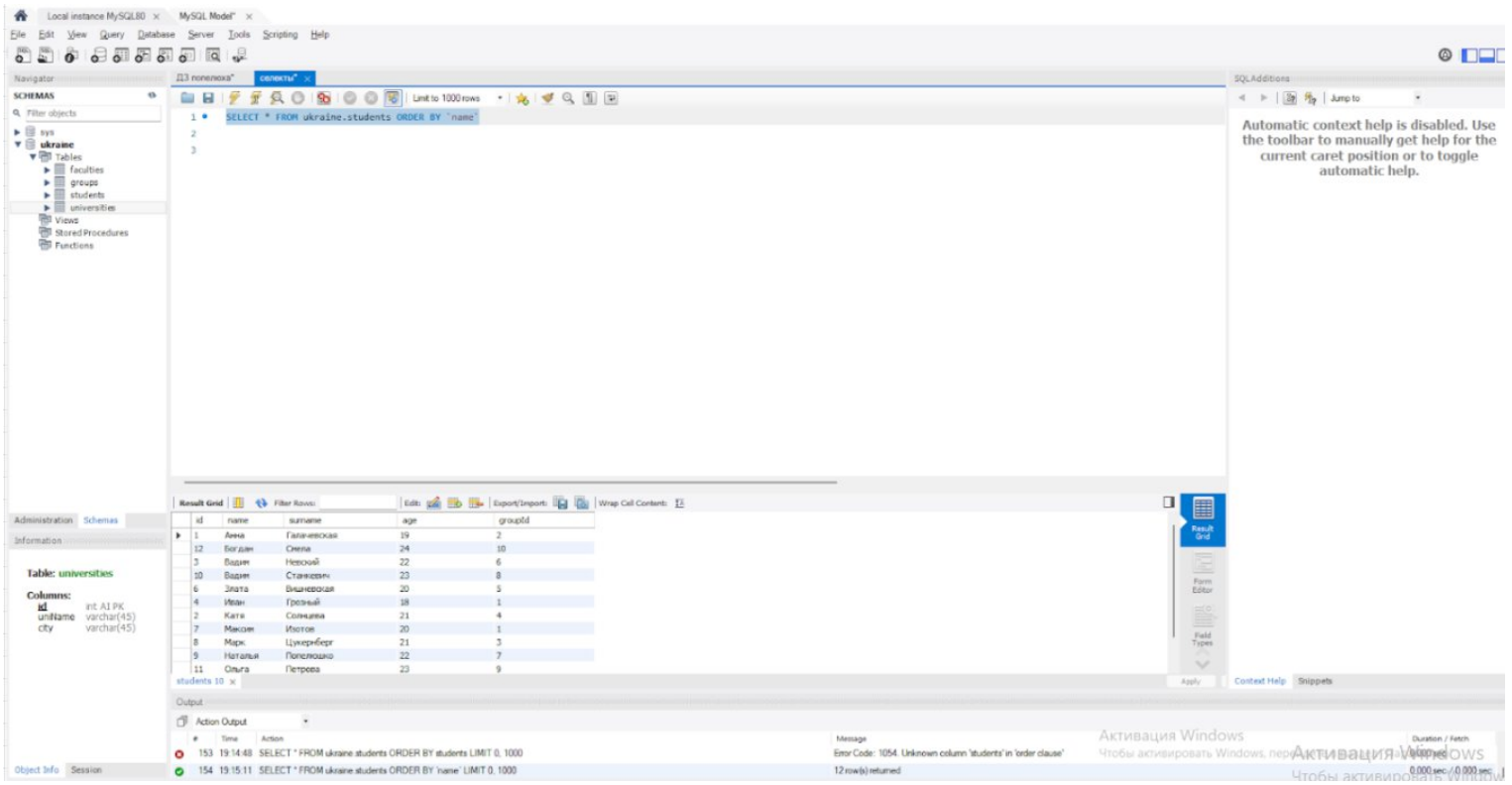
```
SELECT `uniName` FROM `universities` WHERE `uniName` LIKE '%Y';
```

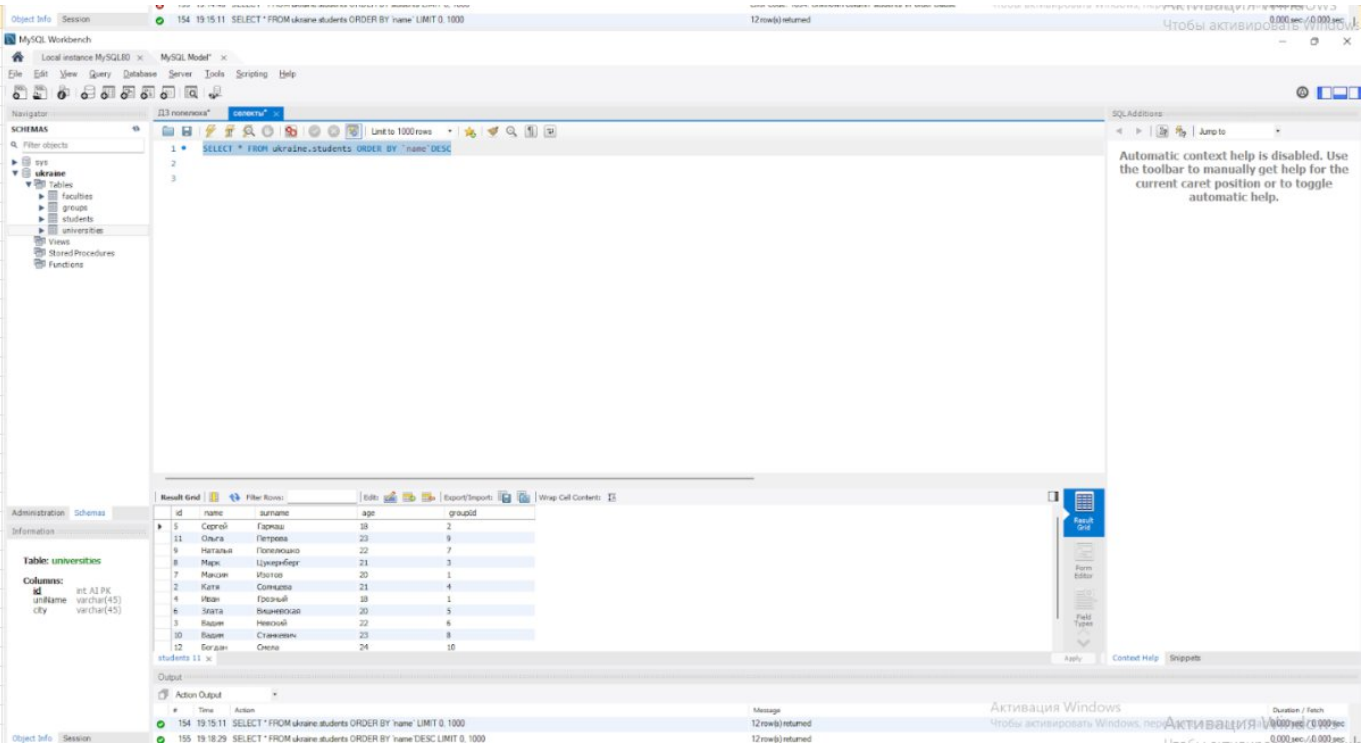
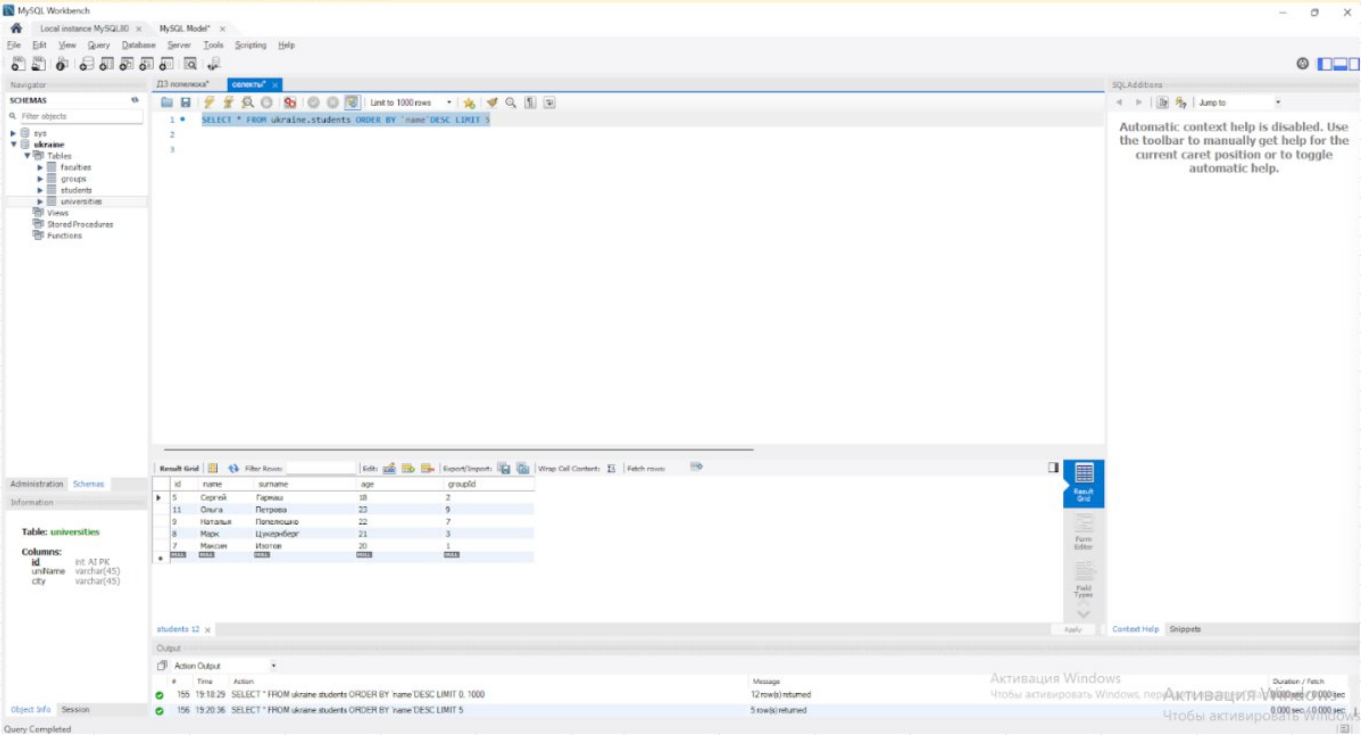
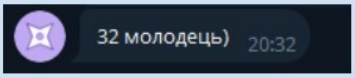




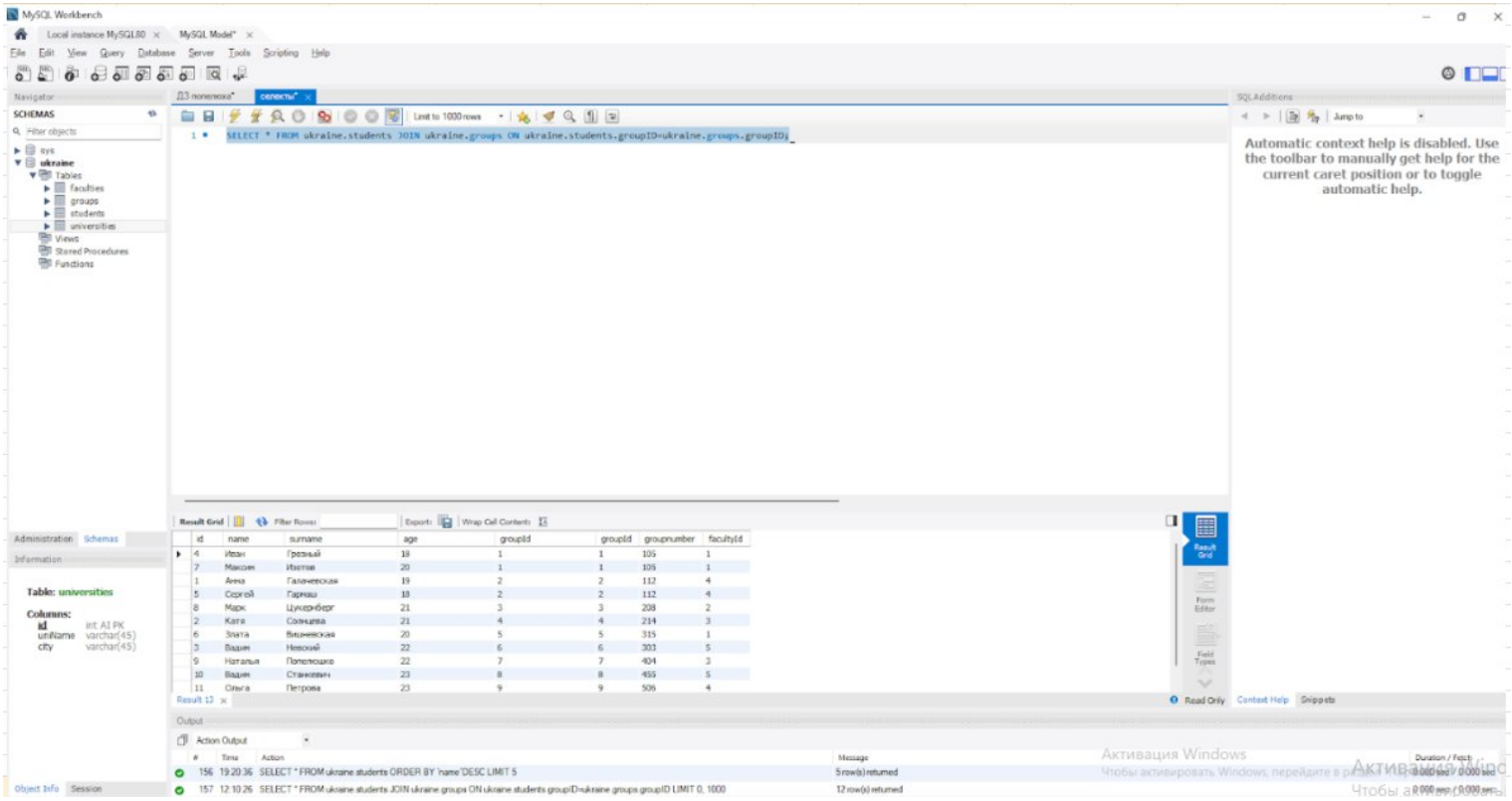
Coach's task:	31. Sort the table students alphabetically and in reverse order. Provide the result as a screenshot (video)	Feedback from the coach:	

Sort order	Attatchments
In alphabetical order	SELECT * FROM ukraine.students ORDER BY `name`

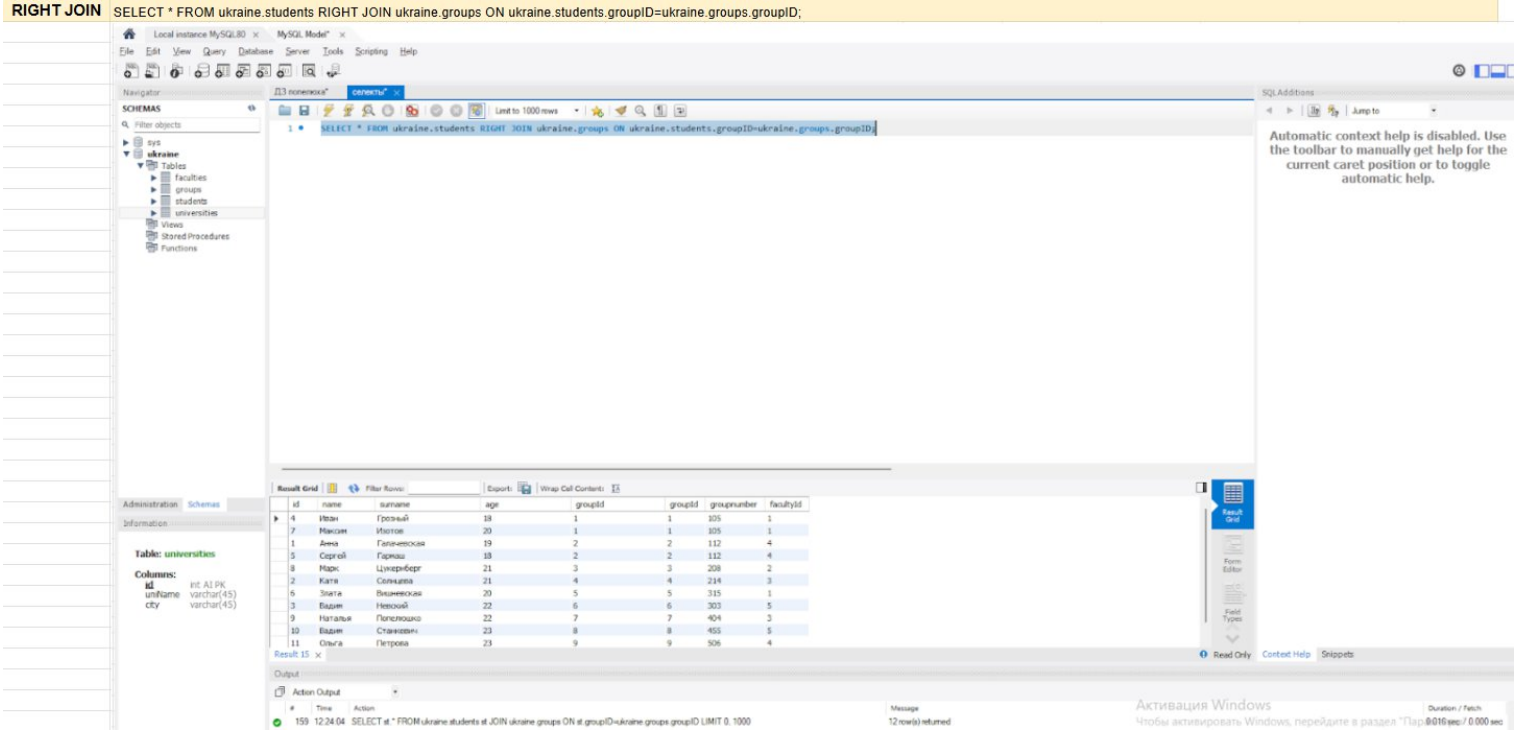


lin reverse order	
Top 5 on the list	SELECT * FROM ukraine.students ORDER BY `name`DESC LIMIT 5
	
Coach's tasks:	32. Create a query that joins the tables students and groups using join. Provide the result as a screenshot (video)
Feedback from the coach:	

Sort order	Attatchments
INNER JOIN	SELECT * FROM ukraine.students JOIN ukraine.groups ON ukraine.students.groupID=ukraine.groups.groupID;

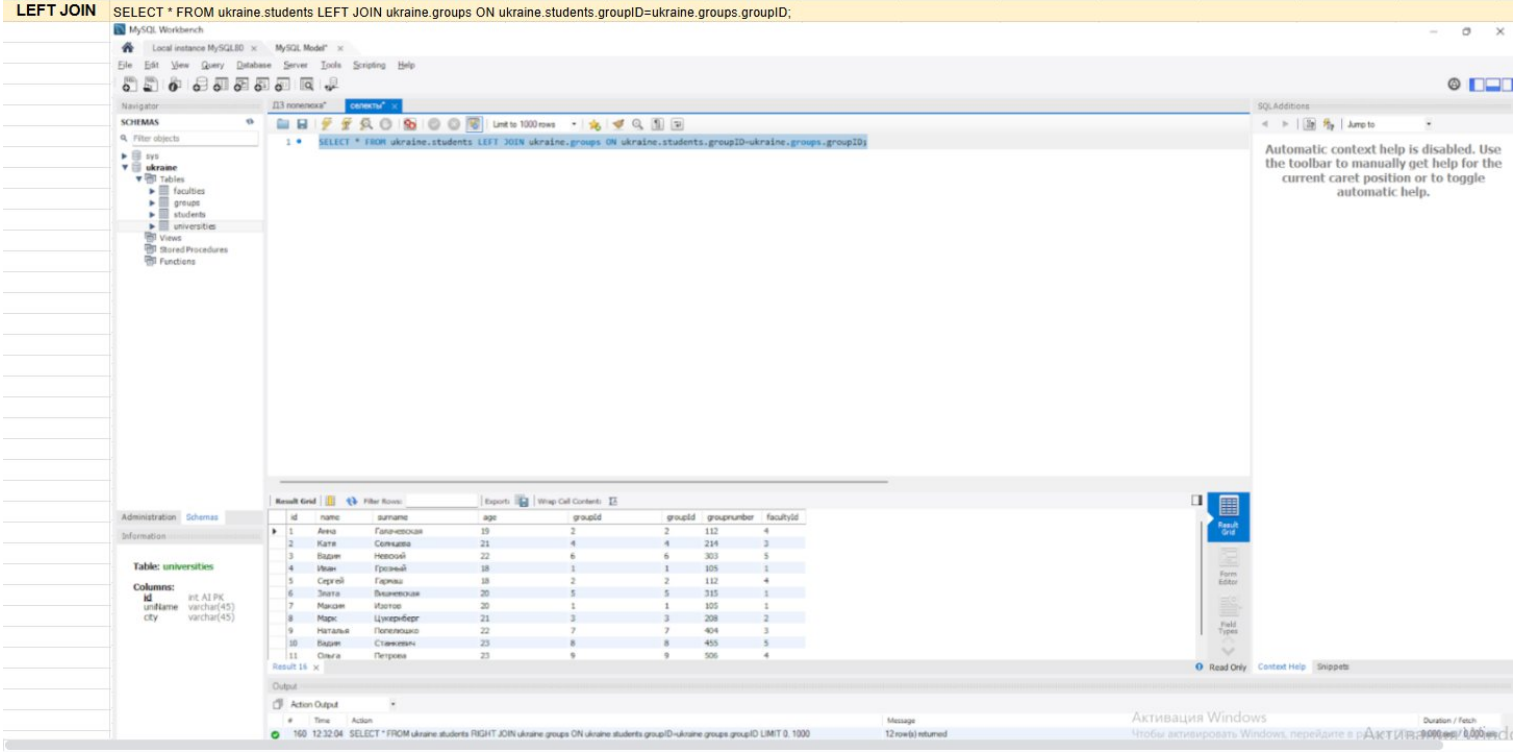


RIGHT JOIN SELECT * FROM ukraine.students RIGHT JOIN ukraine.groups ON ukraine.students.groupID=ukraine.groups.groupID;



LEFT JOIN

```
SELECT * FROM ukraine.students LEFT JOIN ukraine.groups ON ukraine.students.groupID=ukraine.groups.groupID;
```



FULL JOIN

```
SELECT * FROM ukraine.students LEFT JOIN ukraine.groups ON ukraine.students.groupID=ukraine.groups.groupID
UNION ALL
SELECT * FROM ukraine.students RIGHT JOIN ukraine.groups ON ukraine.students.groupID=ukraine.groups.groupID;
```