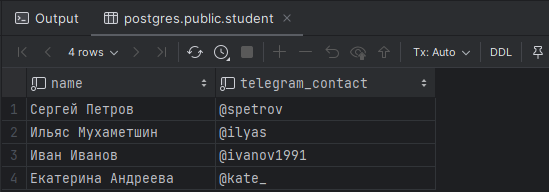
a)

SELECT name , telegram\_contact  
FROM student  
WHERE city='Казань' OR city='Москва'  
ORDER BY name DESC;

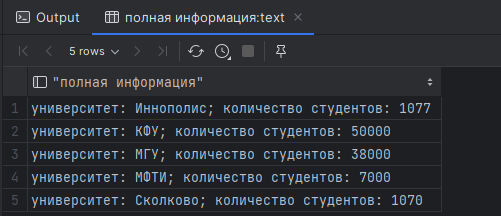
Output:



б)

SELECT ('университет: '|| name || '; количество студентов: '|| size)  
 as "полная информация"  
from college  
ORDER BY "полная информация";

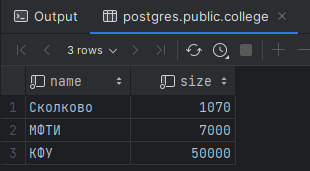
Output:



с)

SELECT name, size  
FROM college  
WHERE id IN (10, 30, 50)  
ORDER BY size, name;

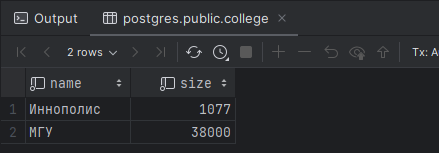
Output:



D)

SELECT name, size  
FROM college  
WHERE id NOT IN (10, 30, 50)  
ORDER BY size, name;

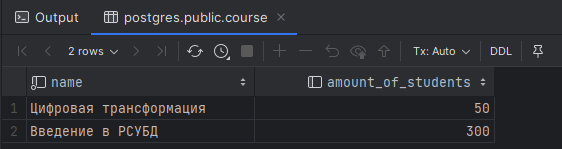
Output:



e)

SELECT name, amount\_of\_students  
FROM course  
WHERE amount\_of\_students  
BETWEEN 27 and 310  
ORDER BY name DESC, amount\_of\_students DESC;

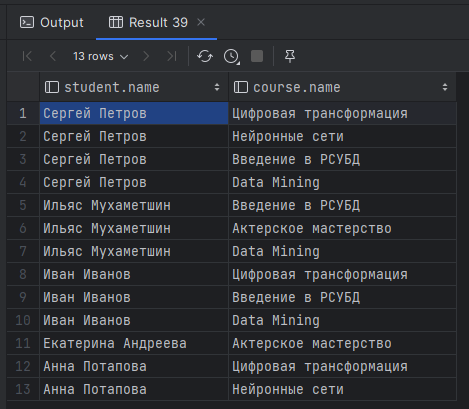
Output:



f)

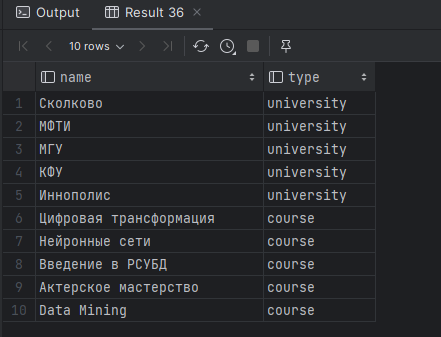
SELECT student.name, course.name  
FROM student  
JOIN student\_on\_course ON student.id = student\_on\_course.student\_id  
JOIN course ON student\_on\_course.course\_id = course.id  
ORDER BY student.name DESC, course.name DESC;

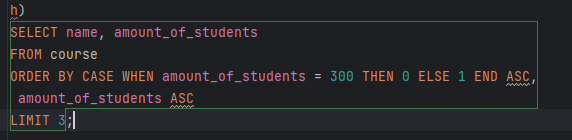
Output:

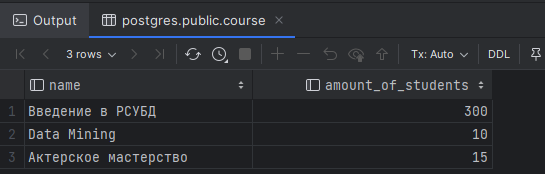


g)

SELECT college.name AS name, 'university' AS type  
FROM college  
UNION ALL  
SELECT course.name AS name, 'course' AS type  
FROM course  
ORDER BY type DESC, name DESC;

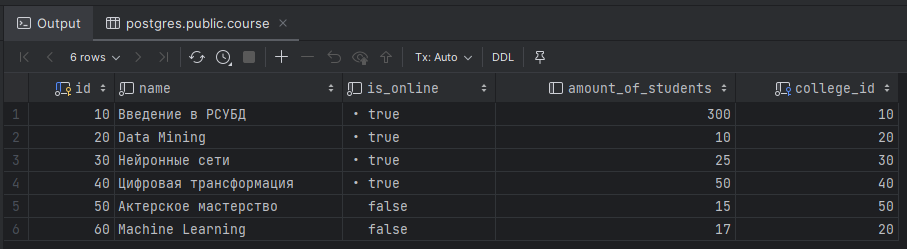






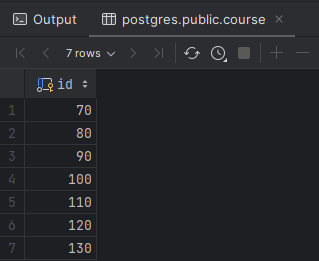
i)

INSERT INTO course (id, name, is\_online, amount\_of\_students, college\_id)  
VALUES (60, 'Machine Learning', false, 17, (SELECT course.id FROM course WHERE course.name = 'Data Mining') ) ;



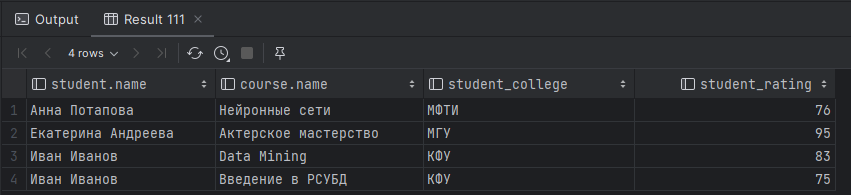
j)

SELECT course.id FROM course  
EXCEPT  
SELECT student\_on\_course.id FROM student\_on\_course  
UNION ALL  
SELECT student\_on\_course.id FROM student\_on\_course  
EXCEPT  
SELECT course.id FROM course  
ORDER BY id;



k)

SELECT student.name, course.name, college.name student\_college, student\_on\_course.student\_rating  
FROM student  
JOIN student\_on\_course ON student.id = student\_on\_course.student\_id  
JOIN course ON student\_on\_course.course\_id = course.id  
JOIN college ON student.college\_id = college.id  
WHERE student\_on\_course.student\_rating > 50 AND college.size > 5000  
ORDER BY student.name, course.name;



.

i)

SELECT DISTINCT *GREATEST*(s1.name, s2.name) AS student\_1, *LEAST*(s1.name, s2.name) AS student\_2, s1.city  
FROM student s1  
JOIN student s2 ON s1.city = s2.city AND s1.id < s2.id  
ORDER BY student\_1 ;

