

Task #33

FULL JOIN

The screenshot shows the MySQL Workbench interface. The SQL editor contains a query that performs a FULL JOIN between the 'students' and 'groupsofstudents' tables. The query is as follows:

```
SELECT * FROM Students LEFT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
SELECT * FROM Students RIGHT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
UNION ALL
SELECT * FROM Students LEFT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
SELECT * FROM Students RIGHT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
WHERE Students.GroupId IS NULL
```

The result grid displays 13 rows of data. The first 11 rows are the result of the UNION ALL query, and the last two rows are the result of the WHERE clause. The columns are: Id, StudentName, Surname, Age, GroupId, Id, GroupNumber, FacultyId.

#	Id	StudentName	Surname	Age	GroupId	Id	GroupNumber	FacultyId
1	1	Иван	Варта	21	8	8	401	8
2	2	Валентин	Буко	23	3	3	103	1
3	3	Иван	Паличов	19	1	1	101	1
4	4	Катерина	Пекур	24	5	5	301	5
5	5	Кирилл	Канисаий	21	7	7	402	2
6	6	Мирта	Ткан	19	3	3	103	1
7	7	Дмитро	Руденко	24	4	4	202	4
8	8	Андрей	Шарай	22	8	8	401	8
9	9	Федор	Полцак	18	10	10	501	7
10	10	Дмитро	Балан	25	9	9	503	9
11	11	Матвей	Груть	19	6	6	304	6
12	12	Иван	Красчук	23	7	7	402	2
13	13	Иван	Красчук	23	7	7	402	2

The output pane shows the execution of the query, with a message indicating that 14 rows were returned.

INNER JOIN

The screenshot shows the MySQL Workbench interface. The SQL editor contains a query that performs an INNER JOIN between the 'students' and 'groupsofstudents' tables. The query is as follows:

```
SELECT * FROM educationdb.students;
SELECT * FROM educationdb.students order by StudentName DESC;
SELECT * FROM Students order by StudentName ASC;
SELECT * FROM Students order by StudentName DESC;
SELECT * FROM Students JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id;
SELECT * FROM Students INNER JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id;
```

The result grid displays 10 rows of data. The first 9 rows are the result of the INNER JOIN query, and the last row is the result of the WHERE clause. The columns are: Id, StudentName, Surname, Age, GroupId, Id, GroupNumber, FacultyId.

#	Id	StudentName	Surname	Age	GroupId	Id	GroupNumber	FacultyId
1	1	Иван	Варта	21	8	8	401	8
2	2	Валентин	Буко	23	3	3	103	1
3	3	Иван	Паличов	19	1	1	101	1
4	4	Катерина	Пекур	24	5	5	301	5
5	5	Кирилл	Канисаий	21	7	7	402	2
6	6	Мирта	Ткан	19	3	3	103	1
7	7	Дмитро	Руденко	24	4	4	202	4
8	8	Андрей	Шарай	22	8	8	401	8
9	9	Федор	Полцак	18	10	10	501	7
10	10	Дмитро	Балан	25	9	9	503	9

The output pane shows the execution of the query, with a message indicating that 12 rows were returned.

LEFT JOIN

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following queries:

```
4 SELECT * FROM Students order by StudentName ASC
5 SELECT * FROM Students order by StudentName DESC
6
7 SELECT * FROM Students JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
8 SELECT * FROM Students INNER JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
9 SELECT * FROM Students LEFT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
10
11
```

The result grid displays the data for the LEFT JOIN query (Result 11). It shows all students and their associated groups, with null values for groups that do not have a corresponding student.

Id	StudentName	Surname	Age	GroupId	Id	GroupNumber	FacultyId
1	Иван	Варта	21	8	8	401	8
2	Валентин	Буко	23	3	3	103	1
3	Иван	Пидючий	19	1	1	101	1
4	Катерина	Пнекур	24	5	5	301	5
5	Кирило	Каленский	21	7	7	402	2
6	Миколта	Ткан	19	3	3	103	1
7	Дмитро	Руденко	24	4	4	202	4
8	Андрей	Шеррай	22	8	8	401	8
9	Федор	Полшук	18	10	10	501	7
10	Дмитро	Балан	25	9	9	503	9
11	Матвей	Груть	19	6	6	304	6
12	Иван	Кравчук	23	7	7	402	2

The output pane shows the execution of the query, indicating that 12 rows were returned.

RIGHT JOIN

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following queries:

```
4 SELECT * FROM Students order by StudentName ASC
5 SELECT * FROM Students order by StudentName DESC
6
7 SELECT * FROM Students JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
8 SELECT * FROM Students INNER JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
9 SELECT * FROM Students LEFT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
10 SELECT * FROM Students RIGHT JOIN GROUPSOFSTUDENTS ON Students.GroupId = GroupsOfStudents.Id
11
```

The result grid displays the data for the RIGHT JOIN query (Result 12). It shows all groups and their associated students, with null values for groups that do not have a corresponding student.

Id	StudentName	Surname	Age	GroupId	Id	GroupNumber	FacultyId
3	Иван	Пидючий	19	1	1	101	1
2	Валентин	Буко	23	3	2	203	3
6	Миколта	Ткан	19	3	3	103	1
7	Дмитро	Руденко	24	4	4	202	4
4	Катерина	Пнекур	24	5	5	301	5
11	Матвей	Груть	19	6	6	304	6
5	Кирило	Каленский	21	7	7	402	2
12	Иван	Кравчук	23	7	7	402	2
1	Иван	Варта	21	8	8	401	8
8	Андрей	Шеррай	22	8	8	401	8
10	Дмитро	Балан	25	9	9	503	9
9	Федор	Полшук	18	10	10	501	7
11					11	405	3

The output pane shows the execution of the query, indicating that 14 rows were returned.