JOINS in MySQL

INNER JOIN, LEFT JOIN, RIGHT JOIN

MySQL da Joinlar bilan ishlash

ass. Baltayev Rustambek

INNER JOIN - ikkala jadvaldagi qiymatlarga mos keladigan qatorlarni tanlaydi.

LEFT JOIN - chap jadvaldagi barcha qatorlarni va o'ng jadvaldagi mos qatorlarni (agar mavjud bo'lsa) qaytaradi.

RIGHT JOIN - barcha qatorlarni o'ng jadvaldan va mos qatorlarni (agar mavjud bo'lsa) chap jadvaldan qaytaradi.

Talabalar

🔑 id	familiya	ism	t_sanasi	🔑 guruh_id
5	Bekchanov	Asadbek	1997-03-29	3
34	Kamolova	Shohista	1999-02-13	1
2	Xabibullayev	Abrorbek	2000-08-04	1
1	Ismoilov	Abdulla	1998-02-24	7
26	Abdullayeva	Nilufar	1999-06-03	11
41	Tajiyeva	Umida	1999-10-25	13
39	Raximberganov	Temurbek	2001-10-05	5
43	O‘rinov	Xalilla	2000-01-10	(NULL)
31	Norimbetov	Ro‘zimboy	2002-07-10	7
8	Sotliqov	Dastonbek	2004-08-22	(NULL)
9	Kuchkarov	Dilshodbek	1999-06-11	11
29	Abdullayeva	Orzigul	2002-09-07	12
37	Nurullayev	Temur	2002-09-25	7
12	Samandarov	Egamberdi	2000-12-03	(NULL)
10	Artikov	Doniyor	2001-05-28	12

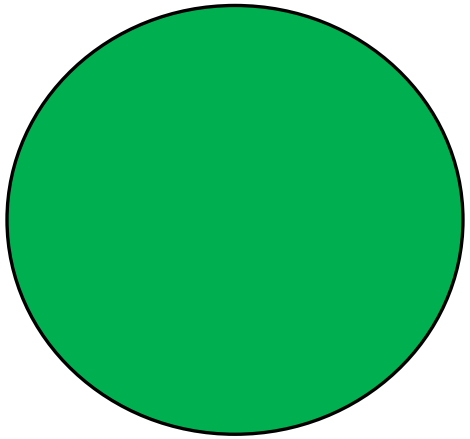
REFERENCES

Guruhlar

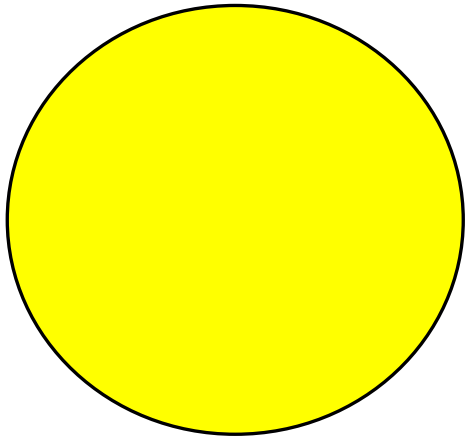
🔑 id	🔑 guruh
1	911-21
2	911-23
3	912-22
4	912-21
5	921-21
6	931-23
7	932-20
8	951-21
9	951-22
10	951-23
11	961-20
12	971-20
13	971-22

INNER JOIN ON Talabalar.guruh_id = Guruhlar.id

Talabalar



Guruhlar



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(NULL)
11
12
7
(NULL)
12

id
1
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4
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6
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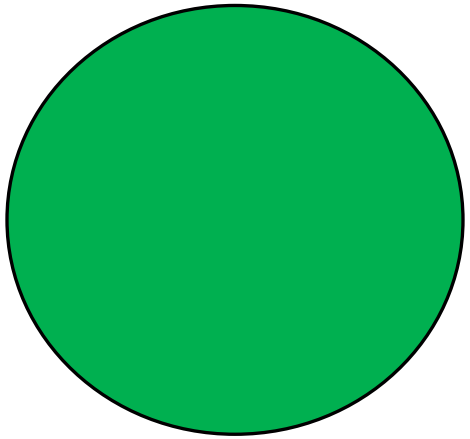
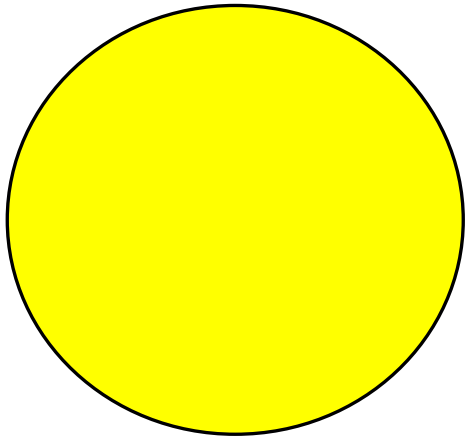
8
9
10
11
12
13

INNER JOIN ON Talabalar.guruh_id = Guruhlar.id

Talabalar



Guruhlar



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id
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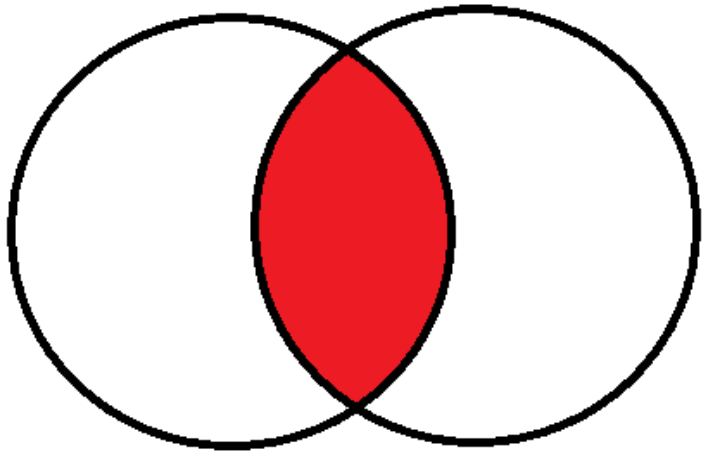
13

INNER JOIN

ON Talabalar.guruh_id = Guruhlar.id

Talabalar

Guruhlar



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4
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6
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8
9
10
11
12
13

JOIN

guruh_id	id
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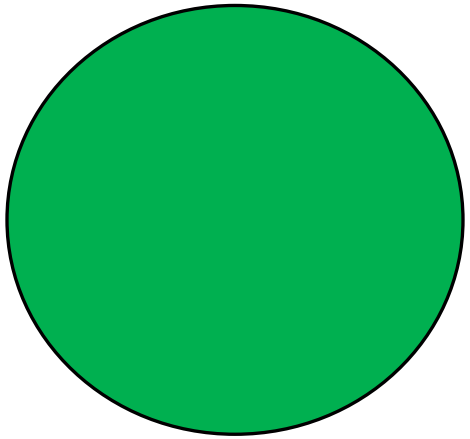
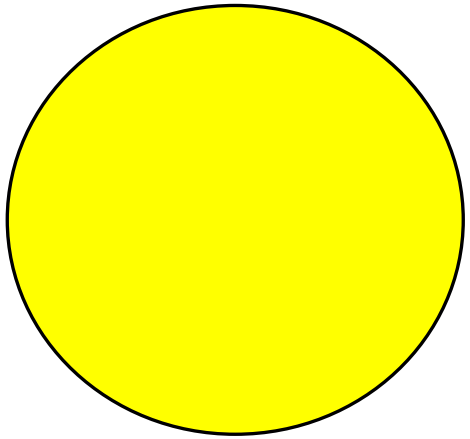
1	**1**
1	**1**
7	**7**
11	**11**
13	**13**
5	**5**
7	**7**
11	**11**
12	**12**
7	**7**
12	**12**

LEFT JOIN ON Talabalar.guruh_id = Guruhlar.id

Talabalar



Guruhlar



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id
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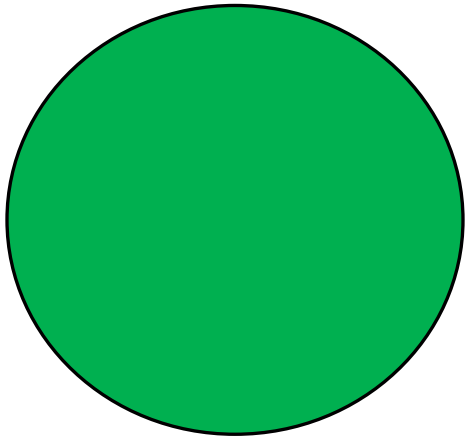
12
13

LEFT JOIN ON Talabalar.guruh_id = Guruhlar.id

Talabalar



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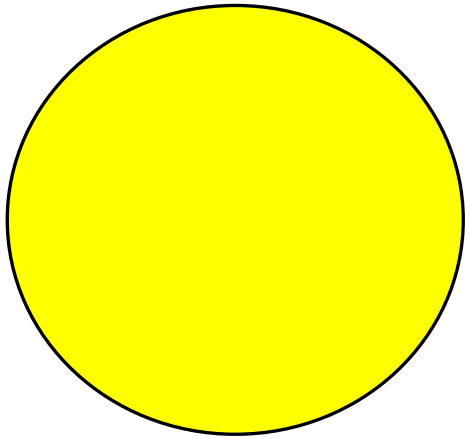

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id
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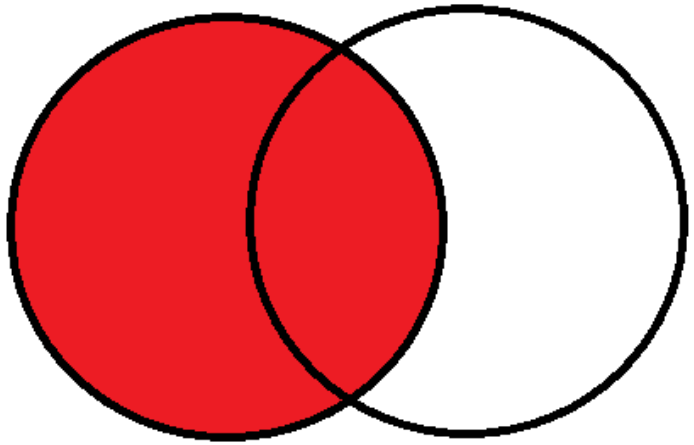
LEFT JOIN

ON Talabalar.guruh_id = Guruhlar.id

Talabalar

Guruhlar



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id
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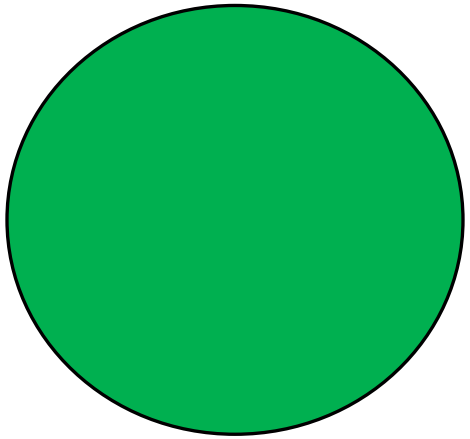
9
10
11
12
13

JOIN

guruh_id	id
3	**3**
1	**1**
1	**1**
7	**7**
11	**11**
13	**13**
5	**5**
(NULL)	(NULL)
7	**7**
(NULL)	(NULL)
11	**11**
12	**12**
7	**7**
(NULL)	(NULL)
12	**12**

RIGHT JOIN ON Talabalar.guruh_id = Guruhlar.id

Talabalar



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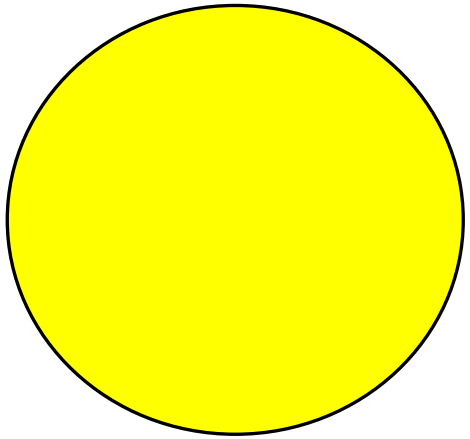

guruh_id
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id
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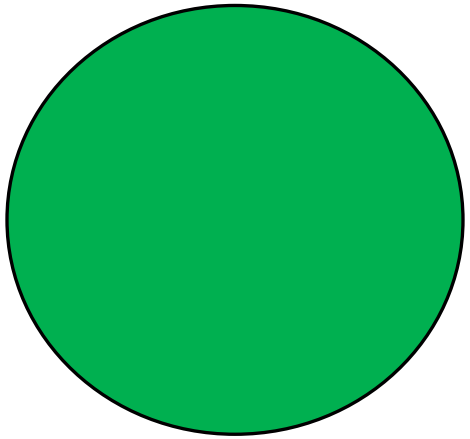
RIGHT JOIN ON Talabalar.guruh_id = Guruhlar.id

Talabalar



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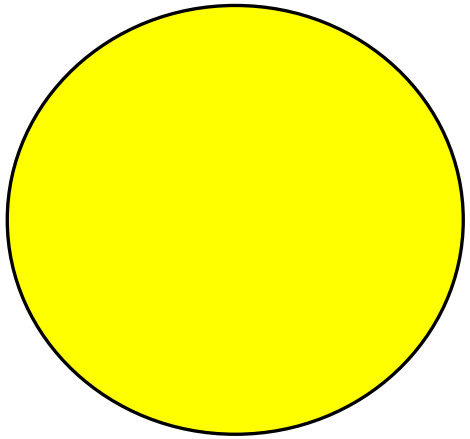

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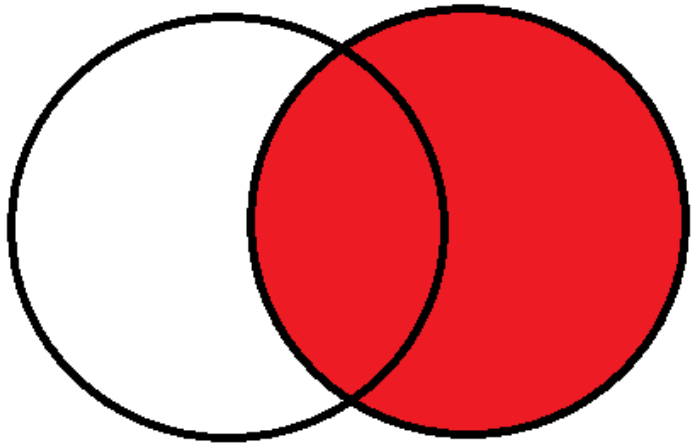
RIGHT JOIN

ON Talabalar.guruh_id = Guruhlar.id

Talabalar

Guruhlar



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10
11
12
13

JOIN

guruh_id	id
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1	**1**
(NULL)	**2**
(NULL)	**4**
3	**3**
5	**5**
(NULL)	**6**
7	**7**
7	**7**
7	**7**
(NULL)	**8**
(NULL)	**9**
(NULL)	**10**
11	**11**
11	**11**
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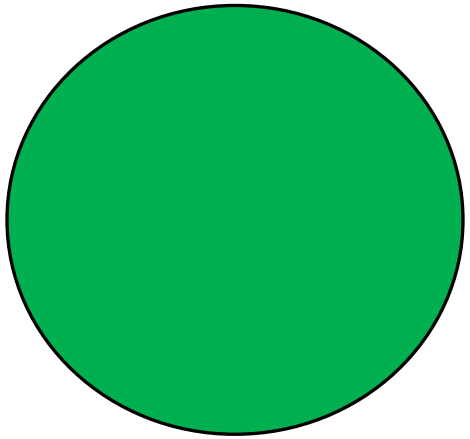
12	**12**
13	**13**

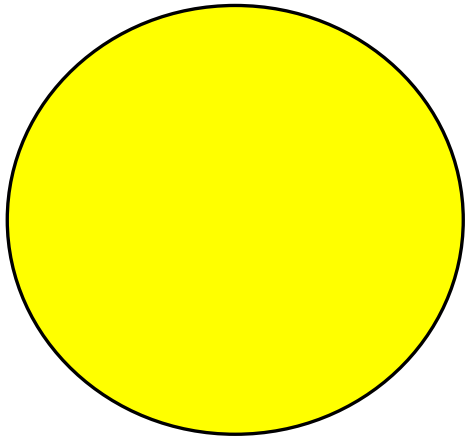
FULL OUTER JOIN ON Talabalar.guruh_id = Guruhlar.id

LEFT JOIN UNION RIGHT JOIN

Talabalar



Guruhlar



guruh_id
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id
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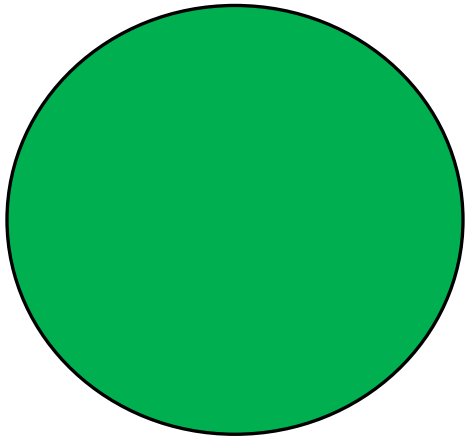
12
13

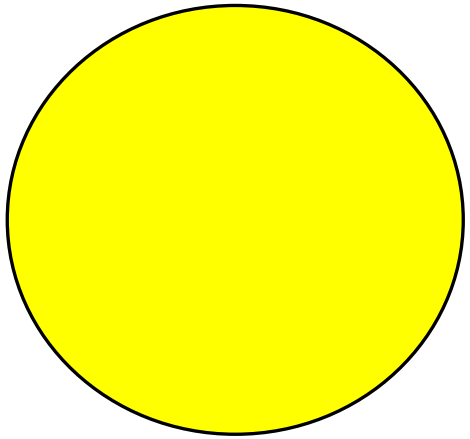
FULL OUTER JOIN ON Talabalar.guruh_id = Guruhlar.id

LEFT JOIN UNION RIGHT JOIN

Talabalar



Guruhlar



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12
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id
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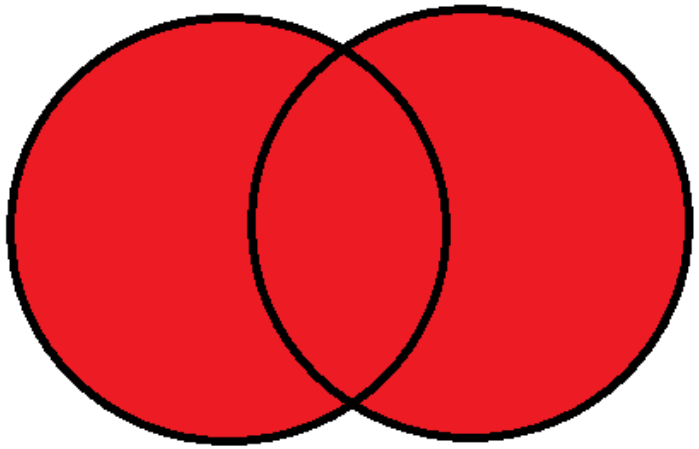
13

FULL OUTER JOIN
LEFT JOIN UNION RIGHT JOIN

Talabalar **Guruhlar**



ON Talabalar.guruh_id = Guruhlar.id

guruh_id
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1
7
11
13
5
(NULL)
7
(NULL)
11
12
7
(NULL)
12

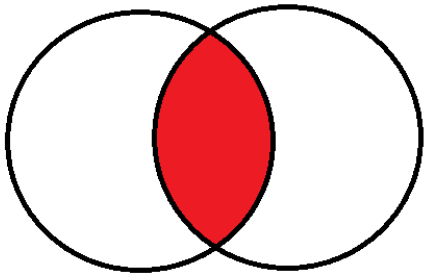
id
1
2
3
4
5
6
7
8
9
10
11
12
13

JOIN

guruh_id	id
1	**1**
1	**1**
(NULL)	**2**
(NULL)	**4**
3	**3**
5	**5**
(NULL)	**6**
7	**7**
7	**7**
7	**7**
(NULL)	**8**
(NULL)	**9**
(NULL)	**10**
11	**11**
11	**11**
12	**12**
12	**12**
13	**13**
(NULL)	(NULL)
(NULL)	(NULL)
(NULL)	(NULL)

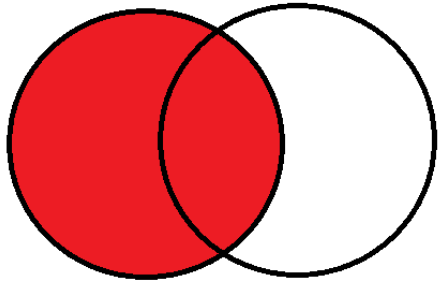
INNER JOIN ishlatilishi:

```
SELECT table_name.column_name, …
FROM table1
INNER JOIN table2
ON table1.column_name = table2.column_name;
```



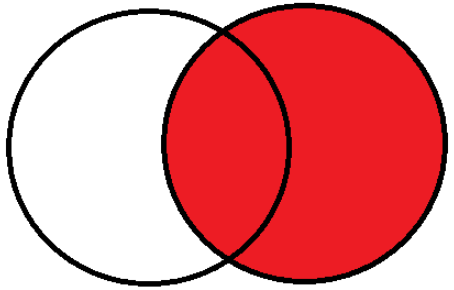
LEFT JOIN ishlatilishi:

```
SELECT table_name.column_name, …
FROM table1
LEFT JOIN table2
ON table1.column_name = table2.column_name;
```



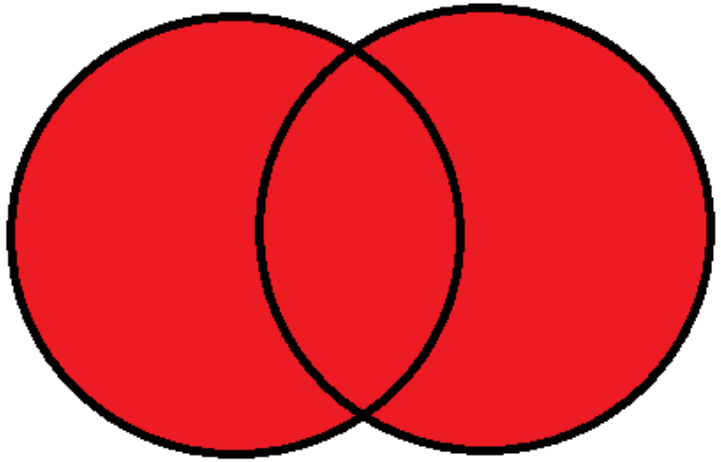
RIGHT JOIN ishlatilishi:

```
SELECT table_name.column_name, …
FROM table1
RIGHT JOIN table2
ON table1.column_name = table2.column_name;
```



FULL OUTER JOIN ishlatilishi:

```
SELECT table_name.column_name, …
FROM table1
LEFT JOIN table2
ON table1.column_name = table2.column_name
UNION
SELECT table_name.column_name, …
FROM table1
RIGHT JOIN table2
ON table1.column_name = table2.column_name;
```



```
SELECT talabalar.ism, talabalar.familiya, talabalar.guruh_id, guruhlar.guruh
FROM talabalar INNER JOIN guruhlar
ON talabalar.guruh_id = guruhlar.id
```

🔑 id	familiya	ism	t_sanasi	🔑 guruh_id
5	Bekchanov	Asadbek	1997-03-29	3
34	Kamolova	Shohista	1999-02-13	1
2	Xabibullayev	Abrorbek	2000-08-04	1
1	Ismoilov	Abdulla	1998-02-24	7
26	Abdullayeva	Nilufar	1999-06-03	11
41	Tajiyeva	Umida	1999-10-25	13
39	Raximberganov	Temurbek	2001-10-05	5
43	O‘rinov	Xalilla	2000-01-10	(NULL)
31	Norimbetov	Ro‘zimboy	2002-07-10	7
8	Sotliqov	Dastonbek	2004-08-22	(NULL)
9	Kuchkarov	Dilshodbek	1999-06-11	11
29	Abdullayeva	Orzigul	2002-09-07	12
37	Nurullayev	Temur	2002-09-25	7
12	Samandarov	Egamberdi	2000-12-03	(NULL)
10	Artikov	Doniyor	2001-05-28	12

Talabalar

🔑 id	🔑 guruh
1	911-21
2	911-23
3	912-22
4	912-21
5	921-21
6	931-23
7	932-20
8	951-21
9	951-22
10	951-23
11	961-20
12	971-20
13	971-22

Guruhlar

```
SELECT talabalar.ism, talabalar.familiya, talabalar.guruh_id, guruhlar.guruh
FROM talabalar INNER JOIN guruhlar
ON talabalar.guruh_id = guruhlar.id
```

ism	familiya	🔑guruh_id	guruh
Asadbek	Bekchanov	3	911-22
Shohista	Kamolova	1	911-21
Abrorbek	Xabibullayev	1	911-21
Abdulla	Ismoilov	7	932-20
Nilufar	Abdullayeva	11	961-20
Umida	Tajiyeva	13	971-22
Temurbek	Raximberganov	5	921-21
Ro‘zimboy	Norimbetov	7	932-20
Dilshodbek	Kuchkarov	11	961-20
Orzigul	Abdullayeva	12	971-20
Temur	Nurullayev	7	932-20
Doniyor	Artikov	12	971-20

```
SELECT *
FROM talabalar INNER JOIN guruhlar
ON talabalar.guruh_id = guruhlar.id
```

🔑 id	familiya	ism	t_sanasi	🔑guruh_id	🔑 id	guruh
5	Bekchanov	Asadbek	1997-03-29	3	**3**	911-22
34	Kamolova	Shohista	1999-02-13	1	**1**	911-21
2	Xabibullayev	Abrorbek	2000-08-04	1	**1**	911-21
1	Ismoilov	Abdulla	1998-02-24	7	**7**	932-20
26	Abdullayeva	Nilufar	1999-06-03	11	**11**	961-20
41	Tajiyeva	Umida	1999-10-25	13	**13**	971-22
39	Raximberganov	Temurbek	2001-10-05	5	**5**	921-21
31	Norimbetov	Ro‘zimboy	2002-07-10	7	**7**	932-20
9	Kuchkarov	Dilshodbek	1999-06-11	11	**11**	961-20
29	Abdullayeva	Orzigul	2002-09-07	12	**12**	971-20
37	Nurullayev	Temur	2002-09-25	7	**7**	932-20
10	Artikov	Doniyor	2001-05-28	12	**12**	971-20

```
SELECT *
FROM talabalar AS t INNER JOIN guruhlar AS g
ON t.guruh_id = g.id
```

🔑 id	familiya	ism	t_sanasi	🔑guruh_id	🔑 id	guruh
5	Bekchanov	Asadbek	1997-03-29	3	**3**	911-22
34	Kamolova	Shohista	1999-02-13	1	**1**	911-21
2	Xabibullayev	Abrorbek	2000-08-04	1	**1**	911-21
1	Ismoilov	Abdulla	1998-02-24	7	**7**	932-20
26	Abdullayeva	Nilufar	1999-06-03	11	**11**	961-20
41	Tajiyeva	Umida	1999-10-25	13	**13**	971-22
39	Raximberganov	Temurbek	2001-10-05	5	**5**	921-21
31	Norimbetov	Ro‘zimboy	2002-07-10	7	**7**	932-20
9	Kuchkarov	Dilshodbek	1999-06-11	11	**11**	961-20
29	Abdullayeva	Orzigul	2002-09-07	12	**12**	971-20
37	Nurullayev	Temur	2002-09-25	7	**7**	932-20
10	Artikov	Doniyor	2001-05-28	12	**12**	971-20

```
SELECT t.ism, t.familiya, t.guruh_id, g.guruh
FROM talabalar AS t INNER JOIN guruhlar AS g
ON t.guruh_id = g.id
```

ism	familiya	🔑guruh_id	guruh
Asadbek	Bekchanov	3	911-22
Shohista	Kamolova	1	911-21
Abrorbek	Xabibullayev	1	911-21
Abdulla	Ismoilov	7	932-20
Nilufar	Abdullayeva	11	961-20
Umida	Tajiyeva	13	971-22
Temurbek	Raximberganov	5	921-21
Ro‘zimboy	Norimbetov	7	932-20
Dilshodbek	Kuchkarov	11	961-20
Orzigul	Abdullayeva	12	971-20
Temur	Nurullayev	7	932-20
Doniyor	Artikov	12	971-20

1-Topshiriq: Talabalar jadvali bilan Shartnomalar jadvalini biriktirib ikkala jadvaldagi barcha ustunni chiqarish so’rovini yozing, bunda talabalar jadvalining barcha qatorini va shartnomalar jadvalidagi unga mos qatorlarni qaytaring

id	familiya	ism	t_sanasi	guruh_id	shartnoma_id
5	Bekchanov	Asadbek	1997-03-29	3	1
34	Kamolova	Shohista	1999-02-13	1	1
2	Xabibullayev	Abrorbek	2000-08-04	1	2
1	Ismoilov	Abdulla	1998-02-24	7	1
26	Abdullayeva	Nilufar	1999-06-03	11	(NULL)
41	Tajiyeva	Umida	1999-10-25	13	2
39	Raximberganov	Temurbek	2001-10-05	5	2
43	O‘rinov	Xalilla	2000-01-10	(NULL)	1
31	Norimbetov	Ro‘zimboy	2002-07-10	7	(NULL)
8	Sotliqov	Dastonbek	2004-08-22	(NULL)	2
9	Kuchkarov	Dilshodbek	1999-06-11	11	1
29	Abdullayeva	Orzigul	2002-09-07	12	2
37	Nurullayev	Temur	2002-09-25	7	(NULL)
12	Samandarov	Egamberdi	2000-12-03	(NULL)	(NULL)
10	Artikov	Doniyor	2001-05-28	12	2

Talabalar

id	shartnoma_turi
1	Grant
2	Kontrakt

Shartnomalar

```
SELECT *
FROM talabalar LEFT JOIN shartnomalar
ON talabalar.shartnoma_id = shartnomalar.id
```

id	familiya	ism	t_sanasi	guruh_id	shartnoma_id	id	shartnoma_turi
5	Bekchanov	Asadbek	1997-03-29	3	1	1	Grant
34	Kamolova	Shohista	1999-02-13	1	1	1	Grant
2	Xabibullayev	Abrorbek	2000-08-04	1	2	2	Kontrakt
1	Ismoilov	Abdulla	1998-02-24	7	1	1	Grant
26	Abdullayeva	Nilufar	1999-06-03	11	(NULL)	(NULL)	(NULL)
41	Tajiyeva	Umida	1999-10-25	13	2	2	Kontrakt
39	Raximberganov	Temurbek	2001-10-05	5	2	2	Kontrakt
43	O‘rinov	Xalilla	2000-01-10	(NULL)	1	1	Grant
31	Norimbetov	Ro‘zimboy	2002-07-10	7	(NULL)	(NULL)	(NULL)
8	Sotliqov	Dastonbek	2004-08-22	(NULL)	2	2	Kontrakt
9	Kuchkarov	Dilshodbek	1999-06-11	11	1	1	Grant
29	Abdullayeva	Orzigul	2002-09-07	12	2	2	Kontrakt
37	Nurullayev	Temur	2002-09-25	7	(NULL)	(NULL)	(NULL)
12	Samandarov	Egamberdi	2000-12-03	(NULL)	(NULL)	(NULL)	(NULL)
10	Artikov	Doniyor	2001-05-28	12	2	2	Kontrakt

2-Topshiriq: Talabalar jadvali bilan Bosqichlar jadvalini biriktirib, Talabalar jadvalidan ism va familiya ustunini Bosqichlar jadvalidan bosqich ustunini chiqaring, bunda ikkala jadvaldagi qiymatlarga mos keladigan qatorlarni qaytaring

🔑 id	familiya	ism	t_sanasi	🔑guruh_id	🔑shartnoma_id	🔑bosqich_id
5	Bekchanov	Asadbek	1997-03-29	3	1	4
34	Kamolova	Shohista	1999-02-13	1	1	3
2	Xabibullayev	Abrorbek	2000-08-04	1	2	(NULL)
1	Ismoilov	Abdulla	1998-02-24	7	1	2
26	Abdullayeva	Nilufar	1999-06-03	11	(NULL)	4
41	Tajiyeva	Umida	1999-10-25	13	2	3
39	Raximberganov	Temurbek	2001-10-05	5	2	3
43	O‘rinov	Xalilla	2000-01-10	(NULL)	1	3
31	Norimbetov	Ro‘zimboy	2002-07-10	7	(NULL)	4
8	Sotliqov	Dastonbek	2004-08-22	(NULL)	2	2
9	Kuchkarov	Dilshodbek	1999-06-11	11	1	(NULL)
29	Abdullayeva	Orzigul	2002-09-07	12	2	1
37	Nurullayev	Temur	2002-09-25	7	(NULL)	4
12	Samandarov	Egamberdi	2000-12-03	(NULL)	(NULL)	3
10	Artikov	Doniyor	2001-05-28	12	2	3

Talabalar

🔑 id	🔑 bosqich
1	1-kurs
2	2-kurs
3	3-kurs
4	4-kurs
5	5-kurs

Bosqichlar

```
SELECT talabalar.ism, talabalar.familiya, bosqichlar.bosqich
FROM talabalar INNER JOIN bosqichlar
ON talabalar.bosqich_id = bosqichlar.id
```

ism	familiya	🔑 bosqich
Asadbek	Bekchanov	4-kurs
Shohista	Kamolova	3-kurs
Abdulla	Ismoilov	2-kurs
Nilufar	Abdullayeva	4-kurs
Umida	Tajiyeva	3-kurs
Temurbek	Raximberganov	3-kurs
Xalilla	O‘rinov	3-kurs
Ro‘zimboy	Norimbetov	4-kurs
Dastonbek	Sotliqov	2-kurs
Orzigul	Abdullayeva	1-kurs
Temur	Nurullayev	4-kurs
Egamberdi	Samandarov	3-kurs
Doniyor	Artikov	3-kurs