

6. SELECT operatori

Tanlash operatori

ass. Baltayev Rustambek

Creat

Read

Update

Delete

SELECT

CRUD

CREATE DATABASE

CREATE TABLE

INSERT INTO

Jadvaldan ma'lumotlarni tanlash so'rovi

```
SELECT ustun_nomi1, ustun_nomi2, ...
```

```
FROM jadval_nomi
```

```
WHERE <shart>
```

Misol: Universitet ma'lumotlar bazasida talabalar jadvali ma'lumotlari quyidagicha bo'lsin

tartib_raqami	fio	T_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
31	Norimbetov Ro'Zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

SELECT fio, shartnoma_turi, guruh FROM talabalar

fio	shartnoma_turi	guruh
Bekchanov Asadbek	Grant	961-20
Kamolova Shohista	Kontrakt	951-21
Xabibullayev Abrorbek	Grant	911-21
Ismoilov Abdulla	Grant	971-22
Abdullayeva Nilufar	Kontrakt	971-20
Tajiyeva Umida	Kontrakt	951-21
Raximberganov Temurbek	Kontrakt	912-21
O'rinov Xalilla	Grant	912-21
Norimbetov Ro'Zimboy	Kontrakt	932-20
Sotliqov Dostonbek	Grant	971-22
Kuchkarov Dilshodbek	Kontrakt	911-21
Abdullayeva Orzigul	Kontrakt	931-23
Nurullayev Temur	Kontrakt	961-20
Samandarov Egamberdi	Kontrakt	911-21
Artikov Doniyor	Kontrakt	921-21
Qurbaniyazov Nazarbek	Grant	911-23

SELECT * FROM talabalar

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
31	Norimbetov Ro'Zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

```
SELECT fio, guruh, bosqich  
FROM talabalar  
WHERE guruh = “911-21”
```

fio	guruh	bosqich
Xabibullayev Abrorbek	911-21	3
Kuchkarov Dilshodbek	911-21	3
Samandarov Egamberdi	911-21	3

Shartli amallar:	Tenglik	=
	Teng emas	!= yoki <>
	Katta	>
	Kichik	<
	Katta yoki teng	>=
	Kichik yoki teng	<=

SELECT * FROM talabalar WHERE bosqich > 3

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt

SELECT fio, shartnoma_turi FROM talabalar WHERE shartnoma_turi <> “Kontrakt”

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

```

SELECT fio, shartnoma_turi
FROM talabalar
WHERE shartnoma_turi <> "Kontrakt"

```

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

```
SELECT fio, shartnoma_turi  
FROM talabalar  
WHERE shartnoma_turi <> “Kontrakt”
```

fio	shartnoma_turi
Bekchanov Asadbek	Grant
Xabibullayev Abrorbek	Grant
Ismoilov Abdulla	Grant
O‘rinov Xalilla	Grant
Sotliqov Dostonbek	Grant
Qurbaniyazov Nazarbek	Grant

SELECT *
FROM talabalar
WHERE fio < “C”

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

SELECT *
FROM talabalar
WHERE fio < “C”

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt

SELECT *
FROM talabalar
WHERE t_sanasi >= “2001-01-01”

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
31	Norimbetov Ro‘zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

AND, OR, NOT

Mantiqiy bog'lovchilar

AND - Mantiqiy ko'paytirish amali

OR - Mantiqiy qo'shish amali

NOT - Mantiqiy inkor amali

AND rostlik jadvali

False	AND	False	→	False
False	AND	True	→	False
True	AND	False	→	False
True	AND	True	→	True

OR rostlik jadvali

False	OR	False	→	False
False	OR	True	→	True
True	OR	False	→	True
True	OR	True	→	True

NOT rostlik jadvali

NOT False \longrightarrow True

NOT True \longrightarrow False

SELECT *

FROM talabalar

WHERE grup = "911-21" OR grup = "912-21"

tartib_raqami	fio	t_sanasi	grup	bosqich	shartnoma_turi
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt

SELECT *
FROM talabalar
WHERE t_sanasi >= “2001-01-01” AND t_sanasi <= “2001-12-31”

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt

SELECT *

FROM talabalar

WHERE NOT bosqich = 4 AND shartnoma_turi = “Grant”

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

SELECT *

FROM talabalar

WHERE NOT (bosqich = 4 AND shartnoma_turi = "Grant")

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	3	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	Kontrakt
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	2001-10-05	912-21	3	Kontrakt
43	O'rinov Xalilla	2000-01-10	912-21	3	Grant
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	Kontrakt
29	Abdullayeva Orzigul	2002-09-07	931-23	1	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	2000-12-03	911-21	3	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	Grant

IS – ustun qiymatini NULL yoki NOT NULL ekanligiga tekshirishda ishlatiladi

=, < yoki <> kabi taqqoslash operatorlari yordamida NULL qiymatlarni solishtirib bo'lmaydi.

Misol: Bazi qiymatlar NULL bo'lganda

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
5	Bekchanov Asadbek	1997-03-29	961-20	4	Grant
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	NULL	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
26	Abdullayeva Nilufar	1999-06-03	971-20	4	NULL
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
39	Raximberganov Temurbek	NULL	912-21	3	NULL
43	O'rinov Xalilla	2000-01-10	912-21	3	NULL
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dastonbek	2004-08-22	971-22	2	Grant
9	Kuchkarov Dilshodbek	1999-06-11	911-21	3	NULL
29	Abdullayeva Orzigul	2002-09-07	931-23	NULL	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
12	Samandarov Egamberdi	NULL	911-21	3	NULL
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt
25	Qurbaniyazov Nazarbek	2003-03-30	911-23	1	NULL

```
SELECT *  
FROM talabalar  
WHERE t_sanasi IS NULL
```

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
39	Raximberganov Temurbek	NULL	912-21	3	Kontrakt
12	Samandarov Egamberdi	NULL	911-21	3	NULL

```
SELECT *  
FROM talabalar  
WHERE shartnoma_turi IS NOT NULL
```

tartib_raqami	fio	t_sanasi	guruh	bosqich	shartnoma_turi
34	Kamolova Shohista	1999-02-13	951-21	3	Kontrakt
2	Xabibullayev Abrorbek	2000-08-04	911-21	NULL	Grant
1	Ismoilov Abdulla	1998-02-24	971-22	2	Grant
41	Tajiyeva Umida	1999-10-25	951-21	3	Kontrakt
31	Norimbetov Ro'zimboy	2002-07-10	932-20	4	Kontrakt
8	Sotliqov Dostonbek	2004-08-22	971-22	2	Grant
29	Abdullayeva Orzigul	2002-09-07	931-23	NULL	Kontrakt
37	Nurullayev Temur	2002-09-25	961-20	4	Kontrakt
10	Artikov Doniyor	2001-05-28	921-21	3	Kontrakt