VERİTBANI TASARIMI

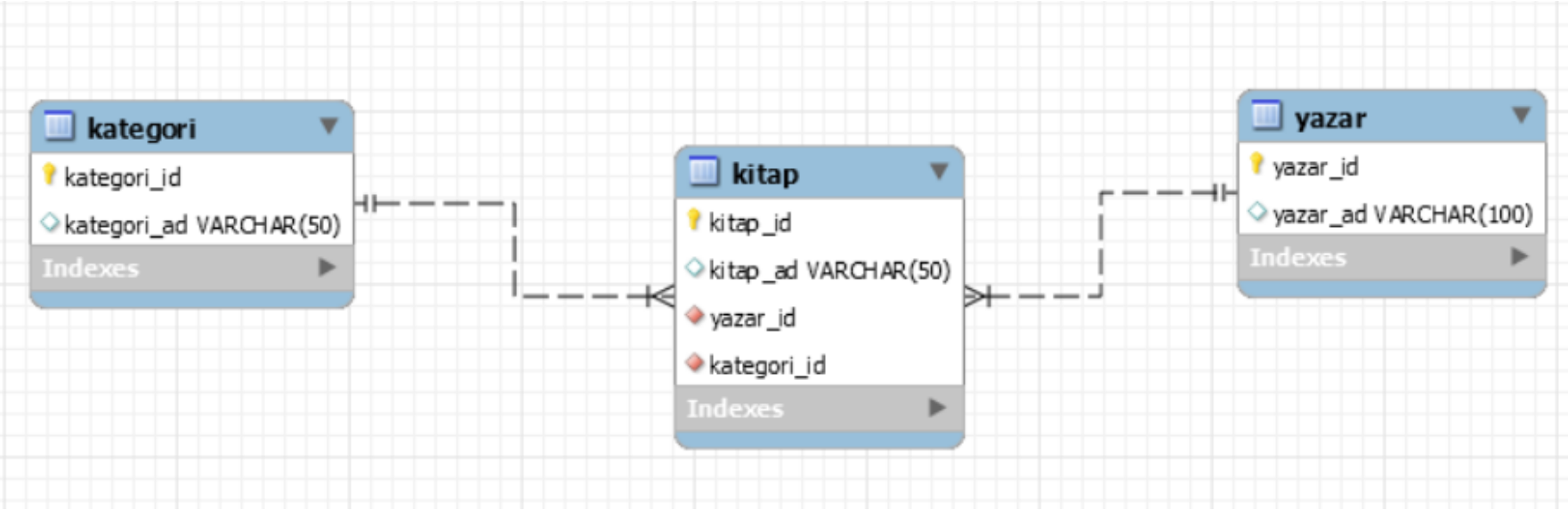
Öğretim Görevlisi A. Berika VAROL MALKOÇOĞLU

BEYKOZ ÜNİVERSİTESİ

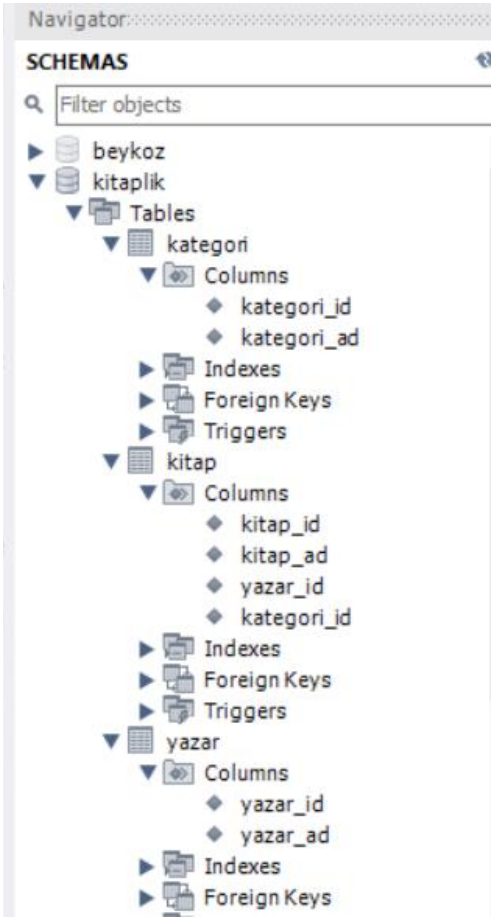
İçindekiler

- DDL örnek veritabanı üzerinde ALTER ve DROP işlemleri
- DML sorgu ifadeleri
- DML örnekleri

Yabancı Anahtar ve E-R Şeması

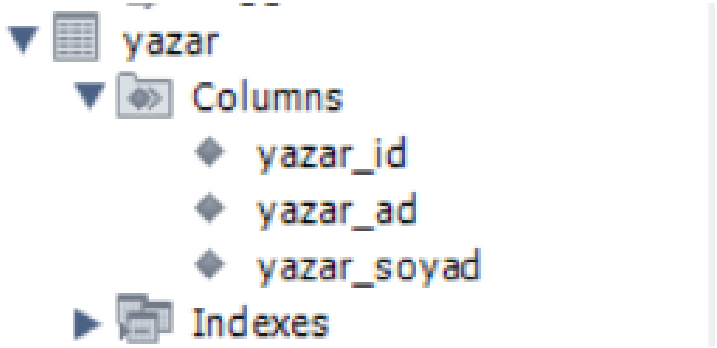


ALTER




```
1 •  ALTER TABLE kitaplik.yazar ADD COLUMN yazar_soyad VARCHAR(25) NULL AFTER yazar_ad;
```

```
41  17:02:49  ALTER TABLE kitaplik.y...  0 row(s) affected Records: 0  Duplicates: 0  Warnings: 0  0.125 sec
```



ALTER

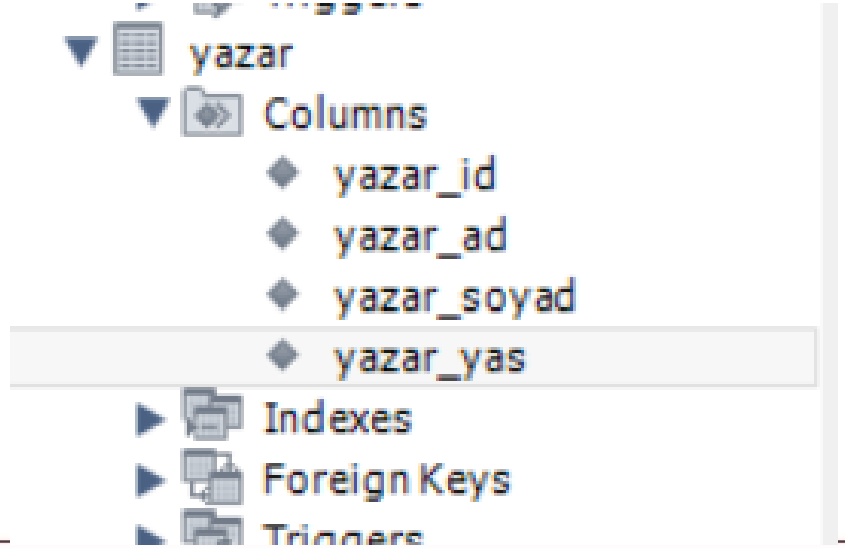
```
3 •    ALTER TABLE kitaplik.yazar ADD COLUMN yas VARCHAR(25) NULL AFTER yazar_soyad;
```

✓	42	17:04:36	ALTER TABLE kitaplik.y...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.032 sec

ALTER

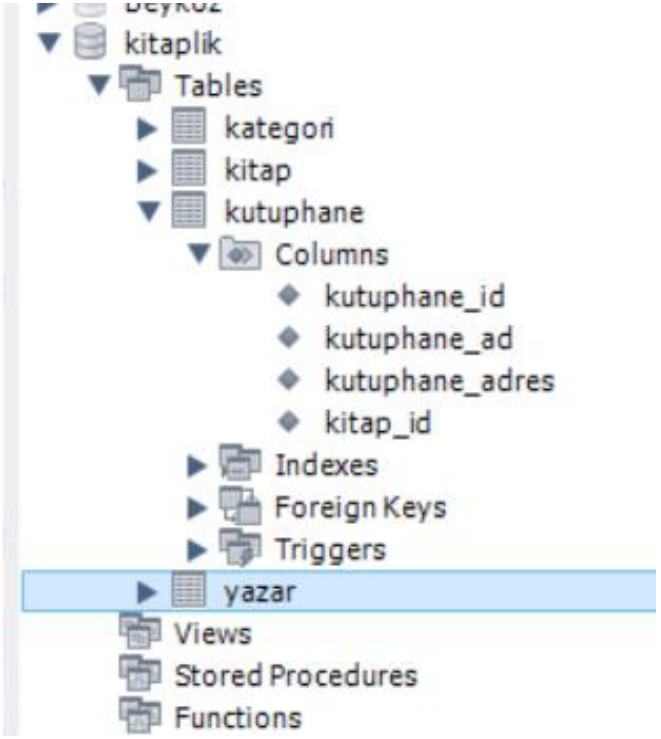
```
5 •   ALTER TABLE kitaplik.yazar CHANGE COLUMN yas yazar_yas INT NULL ;
```

✔	43	17:05:50	ALTER TABLE kitaplik.y...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0		0.094 sec



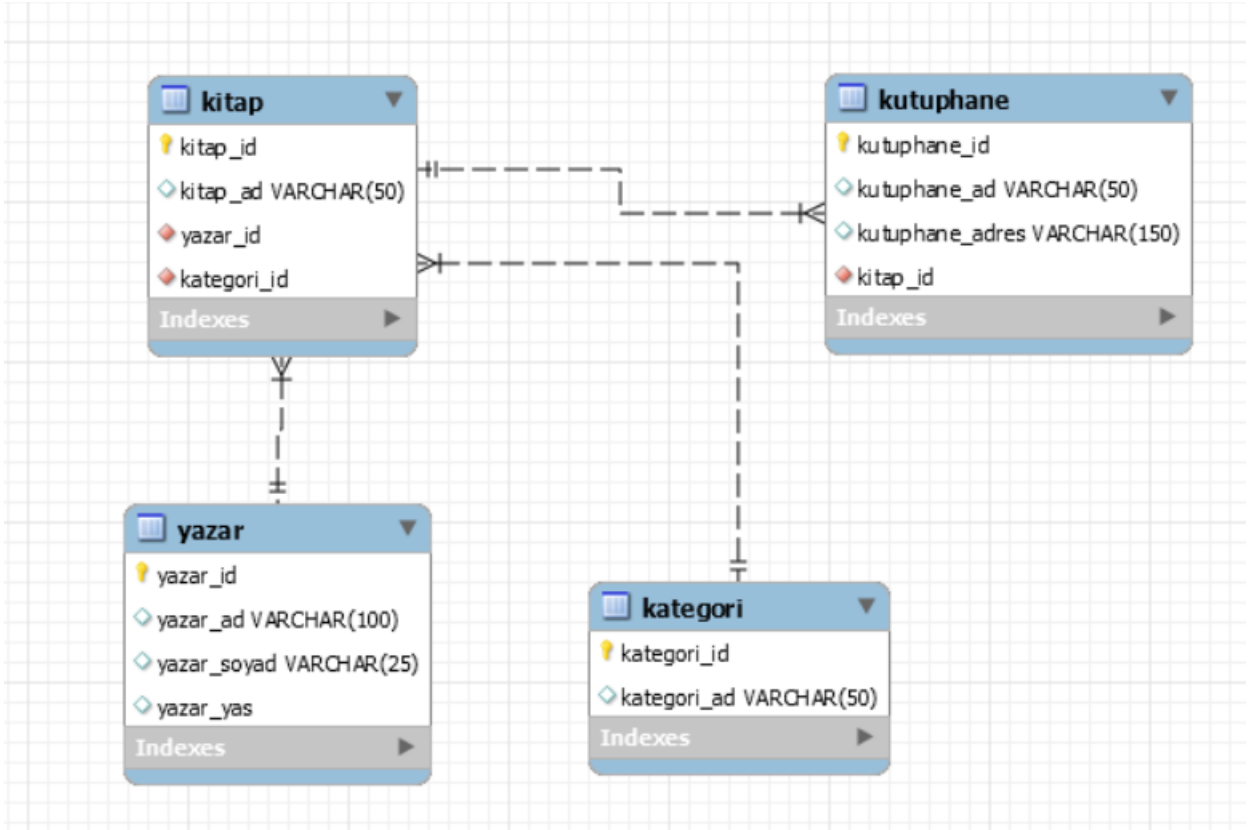
ALTER

```
CREATE TABLE kitaplik.kutuphane (
kutuphane_id INT NOT NULL,
kutuphane_ad VARCHAR(50),
kutuphane_adres VARCHAR(150),
kitap_id INT NOT NULL,
PRIMARY KEY (kutuphane_id));
```



44	17:09:29	CREATE TABLE kitaplik....	0 row(s) affected	0.032 sec

ALTER

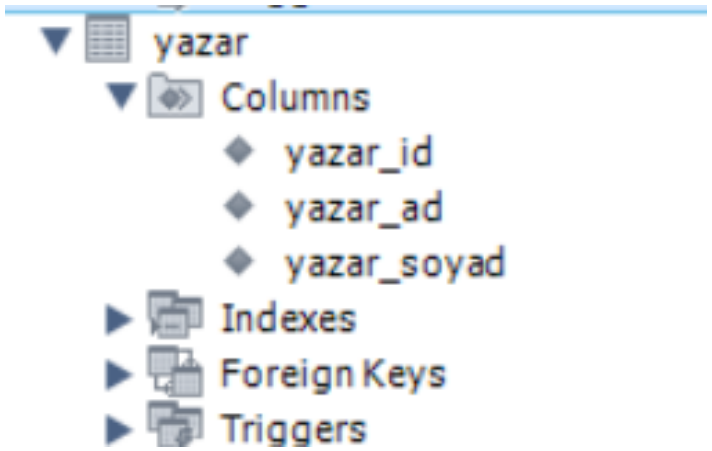



```
ALTER TABLE kitaplik.kutuphane ADD CONSTRAINT  fk_key_kutuphane FOREIGN KEY (kitap_id) REFERENCES kitap(kitap_id);
```

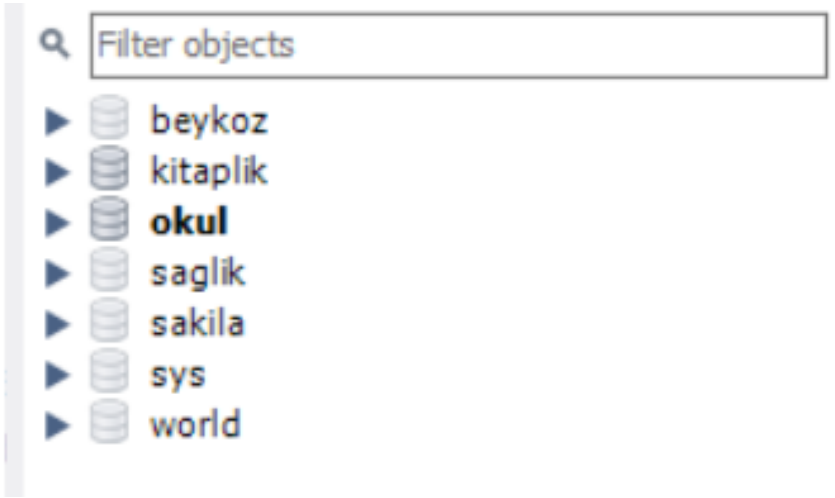
ALTER

```
ALTER TABLE kitaplik.yazar DROP COLUMN yazar_yas;
```

46	17:14:42	ALTER TABLE kitaplik.y...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.062

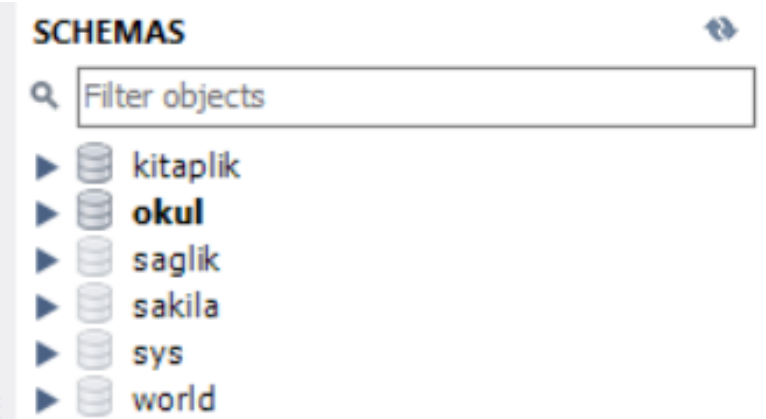


DROP




```
DROP database beykoz;
```

✓	47	17:16:17	DROP database beykoz	1 row(s) affected



VERİTABANI TASARIMI - DML

Veri İşleme Dili (DML)

- Veri İşleme Dili yani (Data Manipulation Language – DML) veritabanı üzerinde yer alan tablolarda seçme, ekleme, silme ve güncelleme işlemlerini sağlayan ifadelerdir.

Select

Insert

Update

Delete

Select

- Veritabanındaki verileri seçmeyi sağlar.

Syntax:

```
SELECT * FROM table_name;
```

Select

```
select * from myo.meslek
```

	id	aciklama
▶	1	Programcı
	2	Avukat
	3	Doktor
*	NULL	NULL

```
select * from myo.musteri
```

	id	ad	yas	meslek_id
▶	1	ahmet	20	1
	2	ali	35	3
*	NULL	NULL	NULL	NULL

Insert

- Veritabanına yeni veriler eklemek için kullanılır.

Syntax:

```
INSERT INTO table_name VALUES (values1, values2, values3, … );
```

Insert

```
insert into myo.meslek values (1,'Programcı');
insert into myo.meslek values (2,'Avukat');
insert into myo.meslek values (3,'Doktor');
commit;
```

```
insert into myo.musteri values(1,'ahmet','20',1);
insert into myo.musteri values(2,'ali','35',3);
commit;
```

Update

- Veriler üzerinde değişiklik (güncelleme) yapmak için kullanılır.

Syntax:

```
UPDATE table_name SET column_name=value WHERE condition ;
```

Update

```
update myo.meslek set aciklama='hemşire' where id=3;
commit;
```

	id	aciklama
▶	1	Programcı
	2	Avukat
	3	hemşire
*	NULL	NULL

Delete

- Veri tabanından veri silmek için kullanılır.

Syntax:

```
DELETE FROM table_name WHERE column_name=value;
```

Delete

```
delete from myo.musteri where id=1;
commit;
```

	id	ad	yas	meslek_id
▶	2	ali	35	3
*	NULL	NULL	NULL	NULL

Örnek SQL İfadeleri

SELECT * FROM world.city;

```
5
6 •   SELECT * FROM world.city ;
```

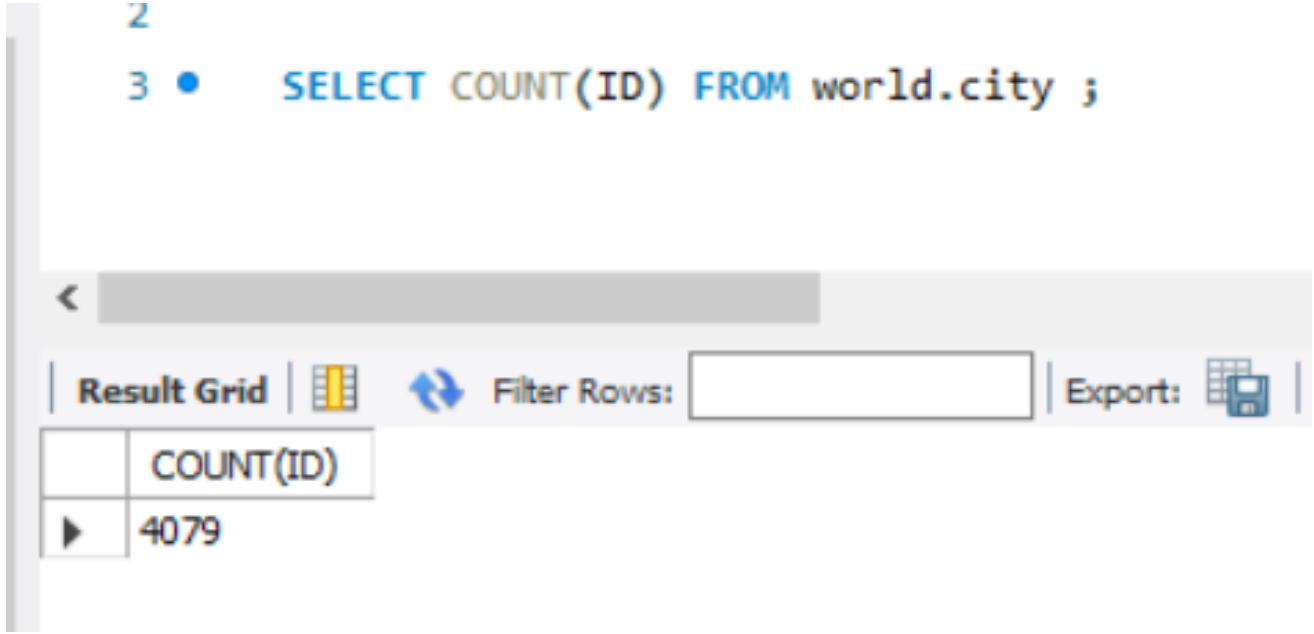
Result Grid | Filter Rows: | Edit: | Export/Import:

ID	Name	CountryCode	District	Population
1	Kabul	AFG	Kabol	1780000
2	Qandahar	AFG	Qandahar	237500
3	Herat	AFG	Herat	186800
4	Mazar-e-Sharif	AFG	Balkh	127800
5	Amsterdam	NLD	Noord-Holland	731200
6	Rotterdam	NLD	Zuid-Holland	593321
7	Haag	NLD	Zuid-Holland	440900
8	Utrecht	NLD	Utrecht	234323
9	Eindhoven	NLD	Noord-Brabant	201843
10	Tilburg	NLD	Noord-Brabant	193238
11	Groningen	NLD	Groningen	172701
12	Breda	NLD	Noord-Brabant	160398
13	Apeldoorn	NLD	Gelderland	153491
14	Nijmegen	NLD	Gelderland	152463
15	Enschede	NLD	Overijssel	149544
16	Haarlem	NLD	Noord-Holland	148772
17	Almere	NLD	Flevoland	142465
18	Arnhem	NLD	Gelderland	138020
19	Zaanstad	NLD	Noord-Holland	135621

city 3 ×

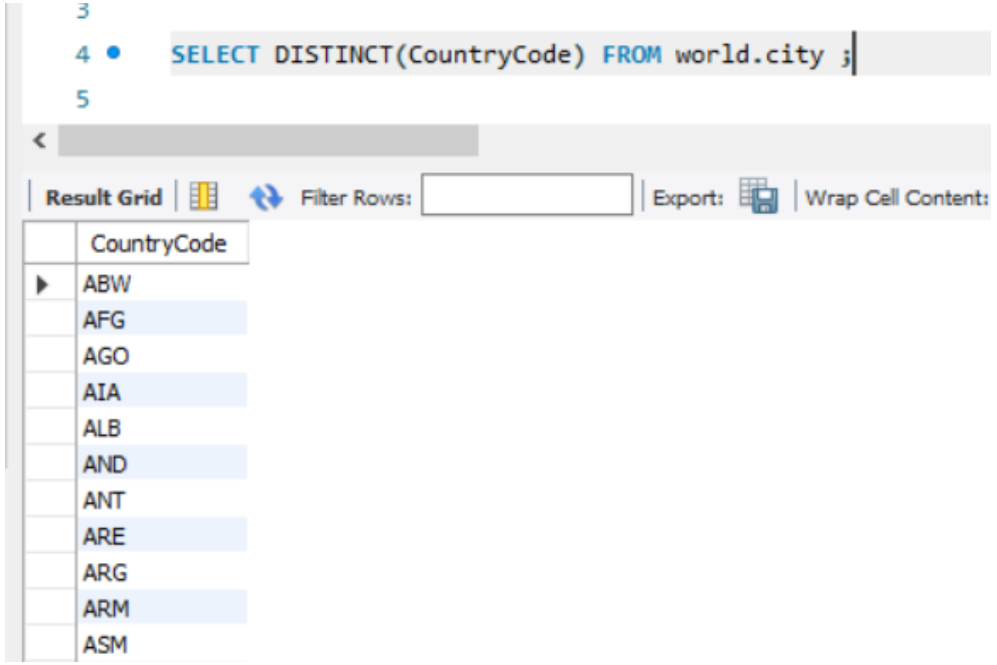
- **COUNT :** Tablo içerisinde belirtilen sütuna ait kaç adet kayıt olduğunu gösterir.

SELECT COUNT(column_name) **FROM** table_name;



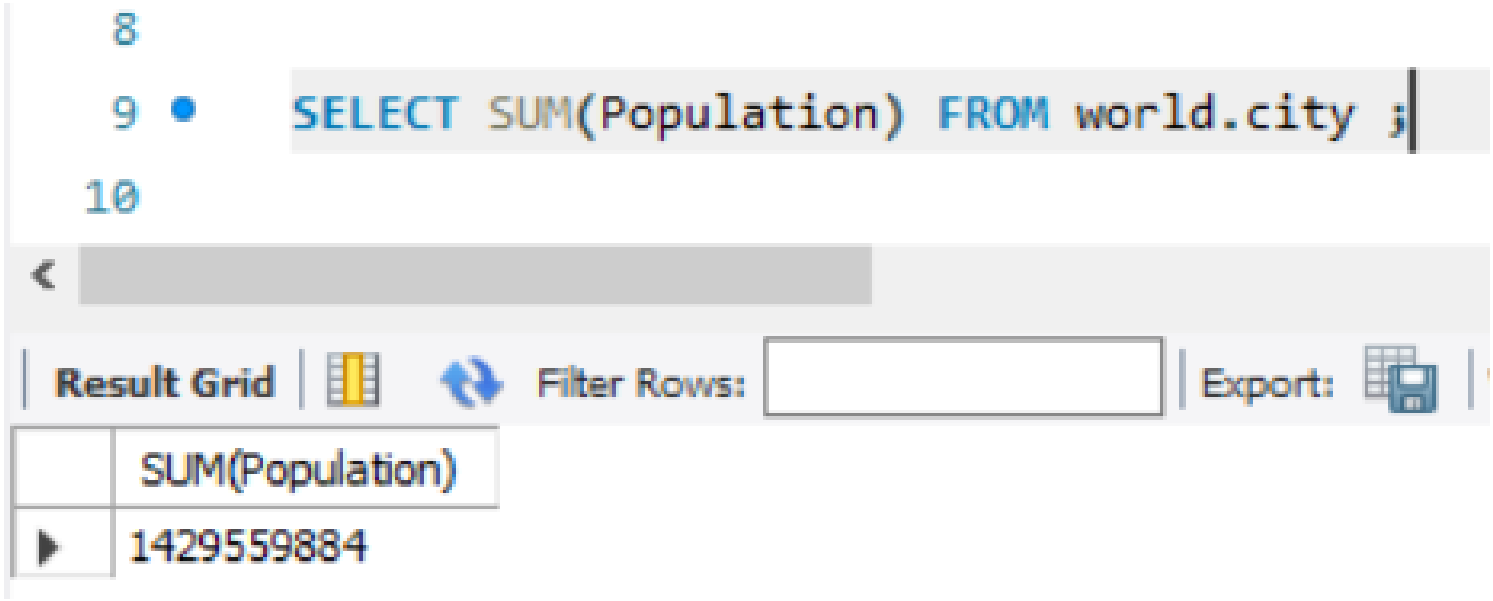
- **DISTINCT:** Seçilen sütunda yinelenen kayıtları döndürmez. Her kaydı bir kez döndürür.

SELECT DISTINCT(column_name) **FROM** table_name;



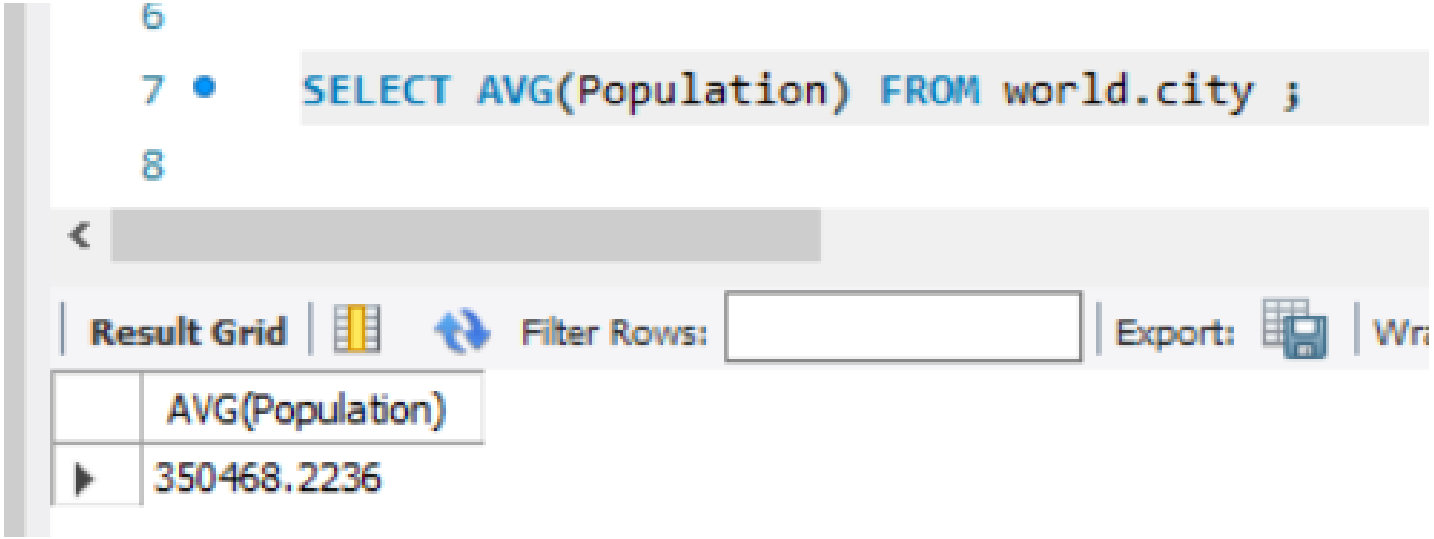
- **SUM:** Sayısal bir sütunun toplam değerini döndürür.

SELECT SUM (column_name1) **FROM** table_name;



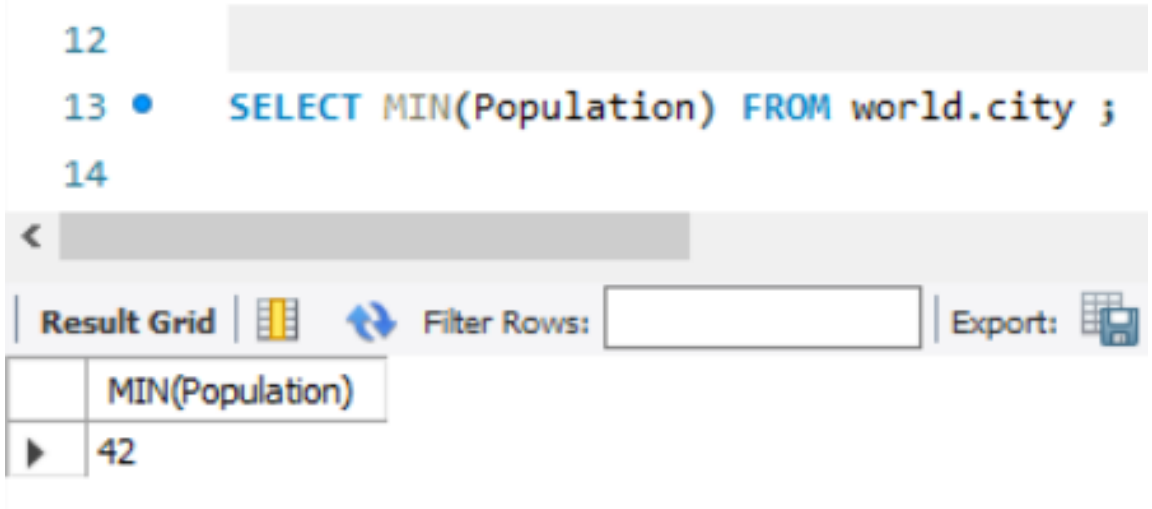
- **AVG :** Sayısal bir sütunun ortalama değerini döndürür.

SELECT AVG (column_name1) **FROM** table_name;



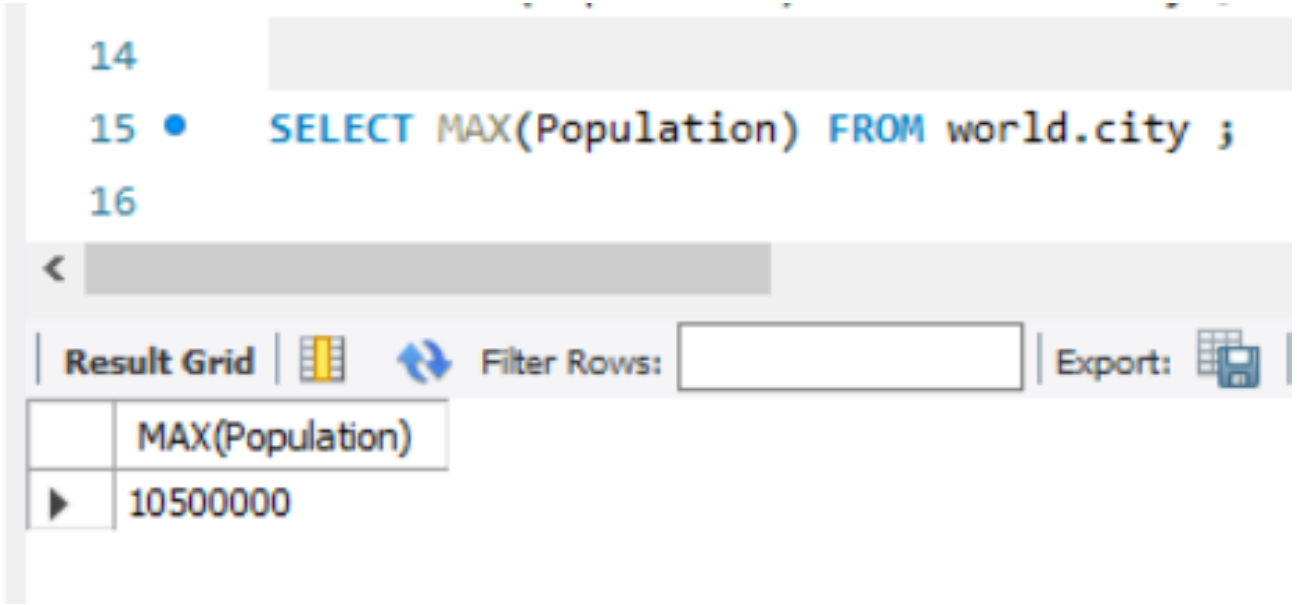
- **MIN :** Seçilen sütunun en küçük değerini döndürür.

SELECT MIN (column_name1) **FROM** table_name;



- **MAX:** Seçilen sütunun en büyük değerini döndürür.

SELECT MAX (column_name1) **FROM** table_name **WHERE** condition;



SELECT * FROM world.country;

```
15 •  SELECT * FROM world.country ;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpectancy	GNP	GNPOld	LocalName
ABW	Aruba	North America	Caribbean	193.00	NULL	103000	78.4	828.00	793.00	Aruba
AFG	Afghanistan	Asia	Southern and Central Asia	652090.00	1919	22720000	45.9	5976.00	NULL	Afganistan/Afqanesta
AGO	Angola	Africa	Central Africa	1246700.00	1975	12878000	38.3	6648.00	7984.00	Angola
AIA	Anguilla	North America	Caribbean	96.00	NULL	8000	76.1	63.20	NULL	Anguilla
ALB	Albania	Europe	Southern Europe	28748.00	1912	3401200	71.6	3205.00	2500.00	ShqipÃ«ria
AND	Andorra	Europe	Southern Europe	468.00	1278	78000	83.5	1630.00	NULL	Andorra
ANT	Netherlands Antilles	North America	Caribbean	800.00	NULL	217000	74.7	1941.00	NULL	Nederlandse Antillen
ARE	United Arab Emirates	Asia	Middle East	83600.00	1971	2441000	74.1	37966.00	36846.00	Al-Imarat al-Â´Arabiy
ARG	Argentina	South America	South America	2780400.00	1816	37032000	75.1	340238.00	323310.00	Argentina
ARM	Armenia	Asia	Middle East	29800.00	1991	3520000	66.4	1813.00	1627.00	Hajastan
ASM	American Samoa	Oceania	Polynesia	199.00	NULL	68000	75.1	334.00	NULL	Amerika Samoa
ATA	Antarctica	Antarctica	Antarctica	13120000.00	NULL	0	NULL	0.00	NULL	Â–
ATF	French Southern ter…	Antarctica	Antarctica	7780.00	NULL	0	NULL	0.00	NULL	Terres australes fran
ATG	Antigua and Barbuda	North America	Caribbean	442.00	1981	68000	70.5	612.00	584.00	Antigua and Barbuda
AUS	Australia	Oceania	Australia and New Zealand	7741220.00	1901	18886000	79.8	351182.00	392911.00	Australia
AUT	Austria	Europe	Western Europe	83859.00	1918	8091800	77.7	211860.00	206025.00	Ã–sterreich
AZE	Azerbaijan	Asia	Middle East	86600.00	1991	7734000	62.9	4127.00	4100.00	AzÃ¤rbaycan
BDI	Burundi	Africa	Eastern Africa	27834.00	1962	6695000	46.2	903.00	982.00	Burundi/Uburundi
BEL	Belgium	Europe	Western Europe	30518.00	1830	10239000	77.8	249704.00	243948.00	BelgiÃ«/Belgique
BEN	Benin	Africa	Western Africa	112622.00	1960	6097000	50.2	2357.00	2141.00	BÃ©nin

- **AVG :** Sayısal bir sütunun ortalama değerini döndürür.

SELECT AVG (column_name1) **FROM** table_name;

```
17 •    SELECT AVG(Population) FROM world.country ;
18
```

Result Grid | Filter Rows: | Export: | Wrap

	AVG(Population)
▶	25434098.1172

- **AS :** Tablo isimlerine takma ad ile değiştirerek işlem kolaylığı sağlar.

SELECT column_name **AS** cn **FROM** table_name **AS** t1;

```
23 •  SELECT Name AS Ülke, Code AS ÜlkeKodu FROM world.country;
24
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Ülke	ÜlkeKodu
Aruba	ABW
Afghanistan	AFG
Angola	AGO
Anguilla	AIA
Albania	ALB
Andorra	AND
Netherlands Antilles	ANT
United Arab Emirates	ARE
Argentina	ARG
Armenia	ARM
American Samoa	ASM
Antarctica	ATA

- **WHERE :** Belirtilen şarta göre tablolar üzerinde işlem yapmamızı sağlar.

SELECT * FROM table_name **WHERE** column_name = value ;

```
24
25 •    SELECT * FROM world.country WHERE Name = 'Turkey';
26
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpectancy	GNP	GNPOld	LocalName	GovernmentForm	HeadOfState	Capital	Code2
TUR	Turkey	Asia	Middle East	774815.00	1923	66591000	71.0	210721.00	189122.00	TÃ¼rkiye	Republic	Ahmet Necdet Sezer	3358	TR
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

SELECT * FROM table_name **WHERE** column_name = value ;

```
30
31 •  SELECT Name, Region FROM world.country WHERE IndepYear<1800;
32
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	Region
Andorra	Southern Europe
Switzerland	Western Europe
China	Eastern Asia
Denmark	Nordic Countries
Spain	Southern Europe
Ethiopia	Eastern Africa
France	Western Europe
United Kingdom	British Islands
Japan	Eastern Asia
Netherlands	Western Europe
Nepal	Southern and C...
Portugal	Southern Europe
San Marino	Southern Europe
Sweden	Nordic Countries
Thailand	Southeast Asia
United States	North America

SELECT * FROM table_name **WHERE** column_name = value ;

```
28
29 •  SELECT * FROM world.country WHERE Continent="Asia";
30
31
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpectancy	GNP
AFG	Afghanistan	Asia	Southern and Central Asia	652090.00	1919	22720000	45.9	5976.00
ARE	United Arab Emirates	Asia	Middle East	83600.00	1971	2441000	74.1	37966.00
ARM	Armenia	Asia	Middle East	29800.00	1991	3520000	66.4	1813.00
AZE	Azerbaijan	Asia	Middle East	86600.00	1991	7734000	62.9	4127.00
BGD	Bangladesh	Asia	Southern and Central Asia	143998.00	1971	129155000	60.2	32852.00
BHR	Bahrain	Asia	Middle East	694.00	1971	617000	73.0	6366.00
BRN	Brunei	Asia	Southeast Asia	5765.00	1984	328000	73.6	11705.00
BTN	Bhutan	Asia	Southern and Central Asia	47000.00	1910	2124000	52.4	372.00
CHN	China	Asia	Eastern Asia	9572900.00	-1523	1277558000	71.4	982268.0
CYP	Cyprus	Asia	Middle East	9251.00	1960	754700	76.7	9333.00
GEO	Georgia	Asia	Middle East	69700.00	1991	4968000	64.5	6064.00
HKG	Hong Kong	Asia	Eastern Asia	1075.00	NULL	6782000	79.5	166448.0
IDN	Indonesia	Asia	Southeast Asia	1904569.00	1945	212107000	68.0	84982.00
IND	India	Asia	Southern and Central Asia	3287263.00	1947	1013662000	62.5	447114.0
IRN	Iran	Asia	Southern and Central Asia	1648195.00	1906	67702000	69.7	195746.0
IRQ	Iraq	Asia	Middle East	438317.00	1932	23115000	66.5	11500.00
ISR	Israel	Asia	Middle East	21056.00	1948	6217000	78.6	97477.00
JOR	Jordan	Asia	Middle East	88946.00	1946	5083000	77.4	7526.00

SELECT * FROM table_name **WHERE** column_name = value ;

```
26
27 •    SELECT count(Name) FROM world.country WHERE Continent="South America";
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	count(Name)
▶	14

- **LIKE :** Aralıkta belirtilen uygun şarta ait kayıtları getirir.

SELECT * FROM table_name **WHERE** column_name **LIKE** ‘%value%’;

```
28
29 •   SELECT * FROM world.country WHERE Name LIKE '%al%';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population
ALB	Albania	Europe	Southern Europe	28748.00	1912	3401200
AUS	Australia	Oceania	Australia and New Zealand	7741220.00	1901	18886000
CAF	Central African Republic	Africa	Central Africa	622984.00	1960	3615000
DZA	Algeria	Africa	Northern Africa	2381741.00	1962	31471000
FLK	Falkland Islands	South America	South America	12173.00	NULL	2000
GIB	Gibraltar	Europe	Southern Europe	6.00	NULL	25000
GNQ	Equatorial Guinea	Africa	Central Africa	28051.00	1968	453000
GTM	Guatemala	North America	Central America	108889.00	1821	11385000
HMD	Heard Island and McDonald Islands	Antarctica	Antarctica	359.00	NULL	0
ITA	Italy	Europe	Southern Europe	301316.00	1861	57680000
MDV	Maldives	Asia	Southern and Central Asia	298.00	1965	286000
MHL	Marshall Islands	Oceania	Micronesia	181.00	1990	64000

- **LIKE :** Aralıkta belirtilen uygun şarta ait kayıtları getirir.

  SELECT * FROM table_name **WHERE** column_name **LIKE** ‘%value%’;

```
30
31 •  SELECT Name as ÜLKE, Population as NÜFUS FROM world.country WHERE Name LIKE '%fr%';
32
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ÜLKE	NÜFUS
French Southern territories	0
Central African Republic	3615000
France	59225700
French Guiana	181000
French Polynesia	235000
South Africa	40377000

- **LIKE :** Aralıkta belirtilen uygun şarta ait kayıtları getirir.

  SELECT * FROM table_name **WHERE** column_name **LIKE** ‘val%’;

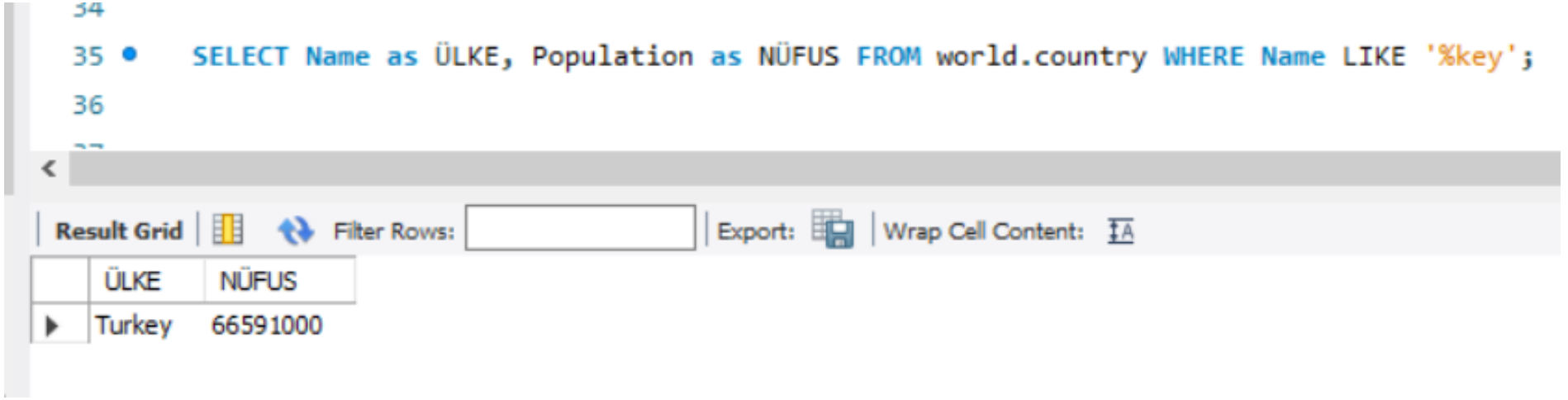
```
33 •  SELECT Name as ÜLKE, Population as NÜFUS FROM world.country WHERE Name LIKE 'fr%';
34
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ÜLKE	NÜFUS
French Southern territories	0
France	59225700
French Guiana	181000
French Polynesia	235000

- **LIKE :** Aralıkta belirtilen uygun şarta ait kayıtları getirir.

  SELECT * FROM table_name **WHERE** column_name **LIKE** ‘%e’;



SELECT * FROM table_name

```
36
37 •    SELECT * FROM world.countryLanguage;
38
```

Result Grid | Filter Rows: | Edit:

CountryCode	Language	IsOfficial	Percentage
ABW	Dutch	T	5.3
ABW	English	F	9.5
ABW	Papiamento	F	76.7
ABW	Spanish	F	7.4
AFG	Balochi	F	0.9
AFG	Dari	T	32.1
AFG	Pashto	T	52.4
AFG	Turkmenian	F	1.9
AFG	Uzbek	F	8.8
AGO	Ambo	F	2.4
AGO	Chokwe	F	4.2
AGO	Kongo	F	13.2
AGO	Luchazi	F	2.4
AGO	Luimbe-ng...	F	5.4
AGO	Luvale	F	3.6

- **AND:** Tüm koşullar sağlanıyorsa kayıt görüntülenir.

SELECT * FROM table_name **WHERE** condition1 **AND** condition2 **AND** condition3 … ;

```
41
42 •    SELECT * FROM world.countryLanguage WHERE Language='English' AND Percentage>95.2;
43
44
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

CountryCode	Language	IsOfficial	Percentage
BMU	English	T	100.0
GBR	English	T	97.3
IRL	English	T	98.4
NULL	NULL	NULL	NULL

- **OR :** Koşullardan herhangi biri sağlanıyorsa kayıt görüntülenir.

SELECT * FROM table_name **WHERE** condition1 **OR** condition2 **OR** condition3 … ;

```
44 •    SELECT * FROM world.countryLanguage WHERE Language='Uzbek' OR Language='Turkish'
45
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

CountryCode	Language	IsOfficial	Percentage
AFG	Uzbek	F	8.8
AUT	Turkish	F	1.5
BEL	Turkish	F	0.9
BGR	Turkish	F	9.4
CYP	Turkish	T	22.4
DEU	Turkish	F	2.6
DNK	Turkish	F	0.8
FRA	Turkish	F	0.4
GRC	Turkish	F	0.9
KAZ	Uzbek	F	2.3
KGZ	Uzbek	F	14.1

- **NOT:** Belirtilen koşul yoksa kayıt görüntülenir.

SELECT * FROM table_name **WHERE NOT** condition;

```
45
46 •    SELECT * FROM world.countryLanguage WHERE NOT Language='English' ;
47
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap C

CountryCode	Language	IsOfficial	Percentage
ABW	Dutch	T	5.3
ABW	Papiamento	F	76.7
ABW	Spanish	F	7.4
AFG	Balochi	F	0.9
AFG	Dari	T	32.1
AFG	Pashto	T	52.4
AFG	Turkmenian	F	1.9
AFG	Uzbek	F	8.8
AGO	Ambo	F	2.4
AGO	Chokwe	F	4.2
AGO	Kongo	F	13.2

- **GROUP BY :** Kayıtları gruplandırmış bir şekilde gösterir.

SELECT * FROM table_name **GROUP BY** column_name;

```
48 •    SELECT Continent, COUNT(*) as ÜLKESAYISI FROM world.country GROUP BY Continent ;
49
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Continent	ÜLKESAYISI
North America	37
Asia	51
Africa	58
Europe	46
South America	14
Oceania	28
Antarctica	5

- **ORDER BY:** Özel sırayla kayırları getirir.

SELECT * FROM table_name **ORDER BY** column_name **ASC/ DESC;**

```
48 •  SELECT * FROM world.country ORDER BY Name ;
49
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpectancy	GNP	GNPOld	LocalName
AFG	Afghanistan	Asia	Southern and Central Asia	652090.00	1919	22720000	45.9	5976.00	NULL	Afganistan/Afqanestan
ALB	Albania	Europe	Southern Europe	28748.00	1912	3401200	71.6	3205.00	2500.00	ShqipÃ«ria
DZA	Algeria	Africa	Northern Africa	2381741.00	1962	31471000	69.7	49982.00	46966.00	Al-JazaÂ'ir/AlgÃ©rie
ASM	American Samoa	Oceania	Polynesia	199.00	NULL	68000	75.1	334.00	NULL	Amerika Samoa
AND	Andorra	Europe	Southern Europe	468.00	1278	78000	83.5	1630.00	NULL	Andorra
AGO	Angola	Africa	Central Africa	1246700.00	1975	12878000	38.3	6648.00	7984.00	Angola
AIA	Anguilla	North America	Caribbean	96.00	NULL	8000	76.1	63.20	NULL	Anguilla
ATA	Antarctica	Antarctica	Antarctica	13120000.00	NULL	0	NULL	0.00	NULL	Â–
ATG	Antigua and Barbuda	North America	Caribbean	442.00	1981	68000	70.5	612.00	584.00	Antigua and Barbuda
ARG	Argentina	South America	South America	2780400.00	1816	37032000	75.1	340238.00	323310.00	Argentina
ARM	Armenia	Asia	Middle East	29800.00	1991	3520000	66.4	1813.00	1627.00	Hajastan
ABW	Aruba	North America	Caribbean	193.00	NULL	103000	78.4	828.00	793.00	Aruba
AUS	Australia	Oceania	Australia and New Zealand	7741220.00	1901	18886000	79.8	351182.00	392911.00	Australia
AUT	Austria	Europe	Western Europe	83859.00	1918	8091800	77.7	211860.00	206025.00	Ã–sterreich
AZE	Azerbaijan	Asia	Middle East	86600.00	1991	7734000	62.9	4127.00	4100.00	AzÃ¤rbaycan
BHS	Bahamas	North America	Caribbean	13878.00	1973	307000	71.1	3527.00	3347.00	The Bahamas

- **HAVING :** WHERE gibidir ancak GROUP BY tarafından döndürülen gruplanmış kayıtlar üzerinde çalışır.

SELECT * FROM table_name **GROUP BY** column_name **HAVING** condition ;

```
55
56 •   SELECT Continent, COUNT(*) AS ÜLKE_SAYISI FROM world.country GROUP BY Continent HAVING ÜLKE_SAYISI<15;
57
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Continent	ÜLKE_SAYISI
South America	14
Antarctica	5

- **LIMIT :** Kayıtları sınırlandırır.

SELECT * FROM table_name **LIMIT** number;

```
53
54 •  SELECT * FROM world.country LIMIT 5;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpe
ABW	Aruba	North America	Caribbean	193.00	NULL	103000	78.4
AFG	Afghanistan	Asia	Southern and Central Asia	652090.00	1919	22720000	45.9
AGO	Angola	Africa	Central Africa	1246700.00	1975	12878000	38.3
AIA	Anguilla	North America	Caribbean	96.00	NULL	8000	76.1
ALB	Albania	Europe	Southern Europe	28748.00	1912	3401200	71.6
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- **BETWEEN :** Seçilen aralığa uyan kayıtlar üzerinde işlem yapar.

SELECT * FROM table_name **WHERE** column_name **BETWEEN** ‘va’ **AND** ’e’;

```
49
50 •  SELECT * FROM world.country WHERE IndepYear BETWEEN 1500 AND 1790;
51
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpectancy	GNP	GNPOld	LocalName	Govern
NLD	Netherlands	Europe	Western Europe	41526.00	1581	15864000	78.3	371362.00	360478.00	Nederland	Constitu
NPL	Nepal	Asia	Southern and Central Asia	147181.00	1769	23930000	57.8	4768.00	4837.00	Nepal	Constitu
USA	United States	North America	North America	9363520.00	1776	278357000	77.1	8510700.00	8110900.00	United States	Federal
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- **BETWEEN :** Seçilen aralığa uyan kayıtlar üzerinde işlem yapar.

SELECT * FROM table_name **WHERE** column_name **BETWEEN** ‘va’ **AND** ’e’;

```
55
56 •   SELECT * FROM world.country WHERE Population BETWEEN 100 AND 3000;
57
```

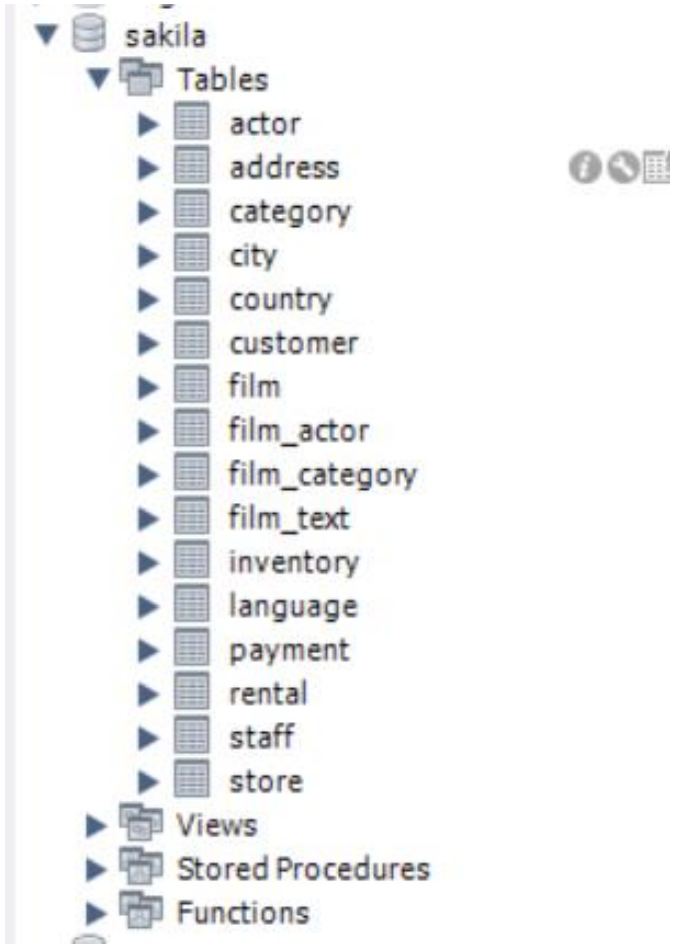
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Code	Name	Continent	Region	SurfaceArea	IndepYear	Population	LifeExpectancy	GNP	GNPOld	LocalName	Goverr
CCK	Cocos (Keeling) Islands	Oceania	Australia and New Zealand	14.00	NULL	600	NULL	0.00	NULL	Cocos (Keeling) Islands	Territor
CXR	Christmas Island	Oceania	Australia and New Zealand	135.00	NULL	2500	NULL	0.00	NULL	Christmas Island	Territor
FLK	Falkland Islands	South America	South America	12173.00	NULL	2000	NULL	0.00	NULL	Falkland Islands	Depend
NFK	Norfolk Island	Oceania	Australia and New Zealand	36.00	NULL	2000	NULL	0.00	NULL	Norfolk Island	Territor
NIU	Niue	Oceania	Polynesia	260.00	NULL	2000	NULL	0.00	NULL	Niue	Nonmet
TKL	Tokelau	Oceania	Polynesia	12.00	NULL	2000	NULL	0.00	NULL	Tokelau	Nonmet
VAT	Holy See (Vatican City State)	Europe	Southern Europe	0.40	1929	1000	NULL	9.00	NULL	Santa Sede/CittÃ del Vaticano	Indepe
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

```
65 •   SELECT * FROM sakila.film;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

film_id	title	description	release_year	language_id	original_language_id	rental_duration	rental_rate
1	ACADEMY DINOSAUR	A Epic Drama of a Feminist And a Mad Scientist ...	2006	1	NULL	6	0.99
2	ACE GOLDFINGER	A Astounding Epistle of a Database Administrat...	2006	1	NULL	3	4.99
3	ADAPTATION HOLES	A Astounding Reflection of a Lumberjack And a ...	2006	1	NULL	7	2.99
4	AFFAIR PREJUDICE	A Fanciful Documentary of a Frisbee And a Lum...	2006	1	NULL	5	2.99
5	AFRICAN EGG	A Fast-Paced Documentary of a Pastry Chef An...	2006	1	NULL	6	2.99
6	AGENT TRUMAN	A Intrepid Panorama of a Robot And a Boy who...	2006	1	NULL	3	2.99
7	AIRPLANE SIERRA	A Touching Saga of a Hunter And a Butler who ...	2006	1	NULL	6	4.99
8	AIRPORT POLLOCK	A Epic Tale of a Moose And a Girl who must Con...	2006	1	NULL	6	4.99
9	ALABAMA DEVIL	A Thoughtful Panorama of a Database Administ...	2006	1	NULL	3	2.99
10	ALADDIN CALENDAR	A Action-Packed Tale of a Man And a Lumberjac...	2006	1	NULL	6	4.99
11	ALAMO VIDEOTAPE	A Boring Epistle of a Butler And a Cat who must ...	2006	1	NULL	6	0.99
12	ALASKA PHANTOM	A Fanciful Saga of a Hunter And a Pastry Chef ...	2006	1	NULL	6	0.99
13	ALI FOREVER	A Action-Packed Drama of a Dentist And a Croc...	2006	1	NULL	4	4.99



```
64
65 •    SELECT COUNT(*) FROM sakila.film ;
66
```

Result Grid | Filter Rows: | Export:

	COUNT(*)
▶	1000

```
68 •  SELECT title as FİLM, release_year as YIL FROM sakila.film WHERE title LIKE '%heart%';
69
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

FİLM	YIL
BEACH HEARTBREAKERS	2006
BRAVEHEART HUMAN	2006
GALAXY SWEETHEARTS	2006
HEARTBREAKERS BRIGHT	2006
RINGS HEARTBREAKERS	2006
SWEETHEARTS SUSPECTS	2006
TELEMARK HEARTBREAKERS	2006

```
65 •  SELECT * FROM sakila.film;
```

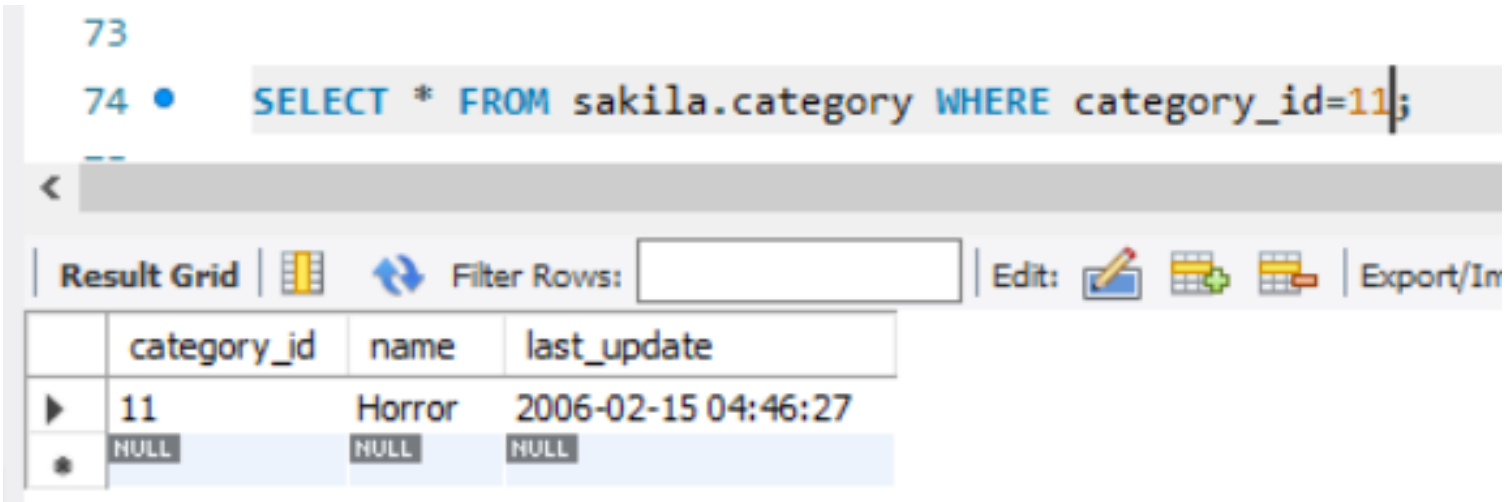
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

film_id	title	description	release_year	language_id	original_language_id	rental_duration	rental_rate	length	replacement_cost	rating	special_features	last_update
1	ACADEMY DINOSAUR	A Epic Drama of a Feminist And a Mad Scientist ...	2006	1	NULL	6	0.99	86	20.99	PG	Deleted Scenes,Behind the Scenes	2006-02-15 05:03:42
2	ACE GOLDFINGER	A Astounding Epistle of a Database Administrat...	2006	1	NULL	3	4.99	48	12.99	G	Trailers,Deleted Scenes	2006-02-15 05:03:42
3	ADAPTATION HOLES	A Astounding Reflection of a Lumberjack And a ...	2006	1	NULL	7	2.99	50	18.99	NC-17	Trailers,Deleted Scenes	2006-02-15 05:03:42
4	AFFAIR PREJUDICE	A Fanciful Documentary of a Frisbee And a Lum...	2006	1	NULL	5	2.99	117	26.99	G	Commentaries,Behind the Scenes	2006-02-15 05:03:42
5	AFRICAN EGG	A Fast-Paced Documentary of a Pastry Chef An...	2006	1	NULL	6	2.99	130	22.99	G	Deleted Scenes	2006-02-15 05:03:42
6	AGENT TRUMAN	A Intrepid Panorama of a Robot And a Boy who...	2006	1	NULL	3	2.99	169	17.99	PG	Deleted Scenes	2006-02-15 05:03:42
7	AIRPLANE SIERRA	A Touching Saga of a Hunter And a Butler who ...	2006	1	NULL	6	4.99	62	28.99	PG-13	Trailers,Deleted Scenes	2006-02-15 05:03:42
8	AIRPORT POLLOCK	A Epic Tale of a Moose And a Girl who must Con...	2006	1	NULL	6	4.99	54	15.99	R	Trailers	2006-02-15 05:03:42
9	ALABAMA DEVIL	A Thoughtful Panorama of a Database Administ...	2006	1	NULL	3	2.99	114	21.99	PG-13	Trailers,Deleted Scenes	2006-02-15 05:03:42
10	ALADDIN CALENDAR	A Action-Packed Tale of a Man And a Lumberjac...	2006	1	NULL	6	4.99	63	24.99	NC-17	Trailers,Deleted Scenes	2006-02-15 05:03:42
11	ALAMO VIDEOTAPE	A Boring Epistle of a Butler And a Cat who must ...	2006	1	NULL	6	0.99	126	16.99	G	Commentaries,Behind the Scenes	2006-02-15 05:03:42
12	ALASKA PHANTOM	A Fanciful Saga of a Hunter And a Pastry Chef ...	2006	1	NULL	6	0.99	136	22.99	PG	Commentaries,Deleted Scenes	2006-02-15 05:03:42
13	ALI FOREVER	A Action-Packed Drama of a Dentist And a Croc...	2006	1	NULL	4	4.99	150	21.99	PG	Deleted Scenes,Behind the Scenes	2006-02-15 05:03:42

```
64 •  SELECT * FROM sakila.film_category WHERE film_id=2;
```

Result Grid | Filter Rows: | Edit: | Export

film_id	category_id	last_update
2	11	2006-02-15 05:07:09
NULL	NULL	NULL


73
74
SELECT * FROM sakila.category WHERE category_id=11;
Result Grid
Filter Rows:
Edit:
Export/Im
category_id
name
last_update
11
Horror
2006-02-15 04:46:27
NULL
NULL
NULL