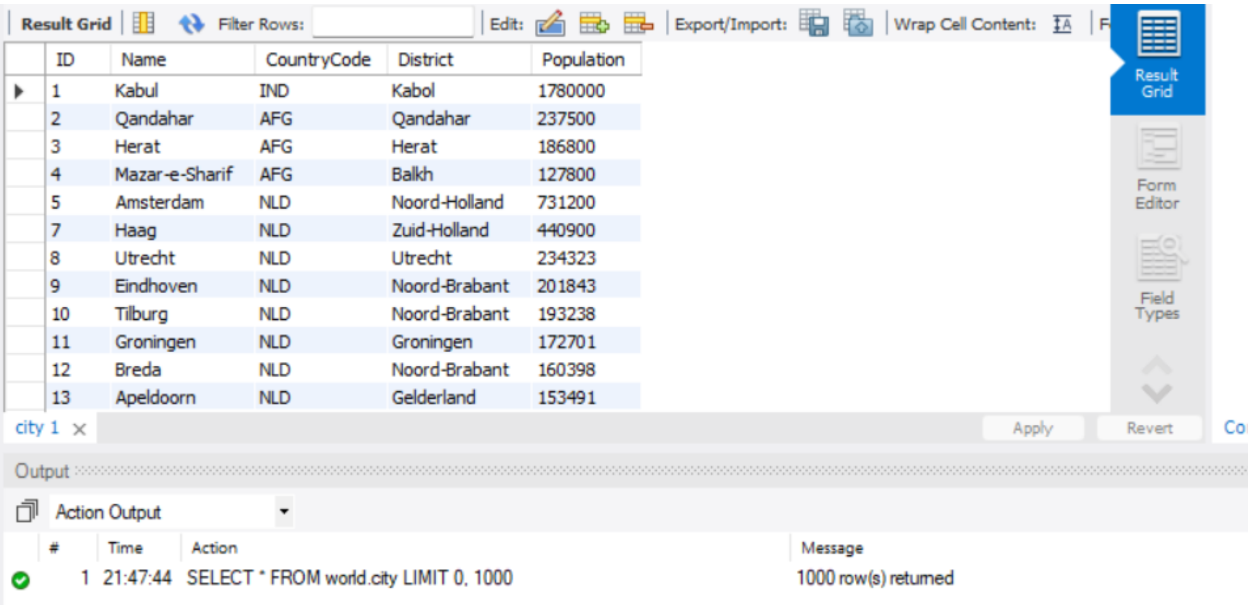
MySQL Database Screenshots

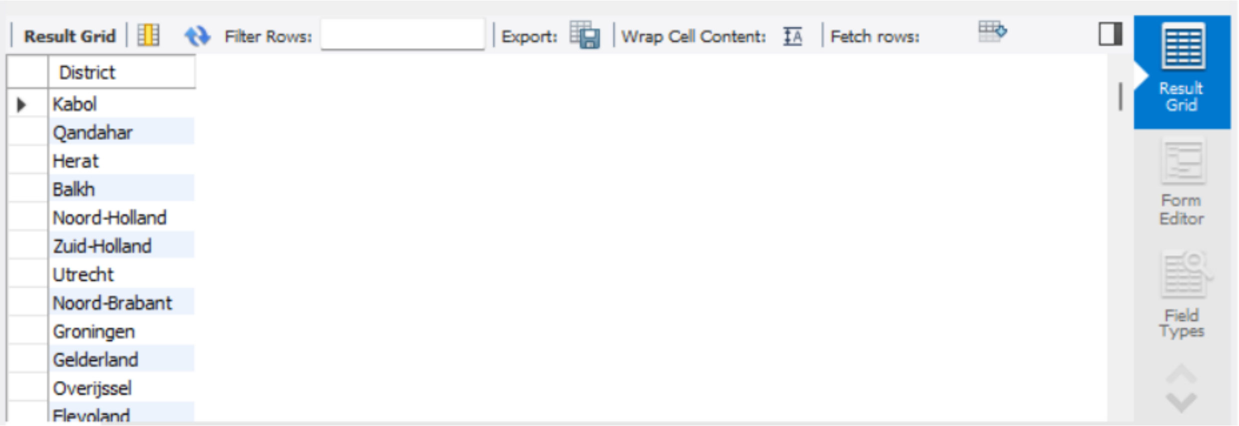
1. SELECT * FROM world.city;



ID	Name	CountryCode	District	Population
1	Kabul	IND	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
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

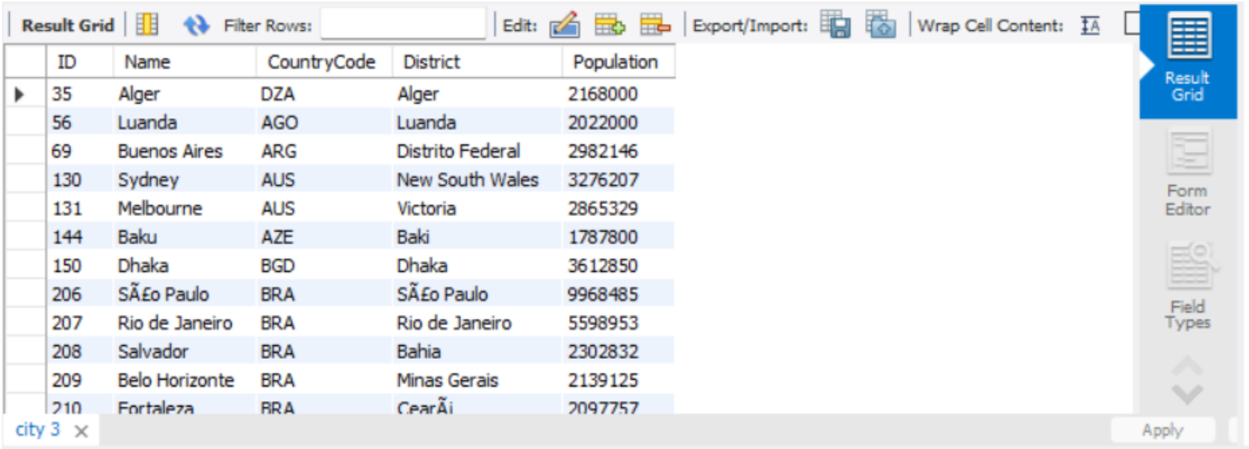
#	Time	Action	Message
1	21:47:44	SELECT * FROM world.city LIMIT 0, 1000	1000 row(s) returned

2. SELECT DISTINCT District FROM world.city;



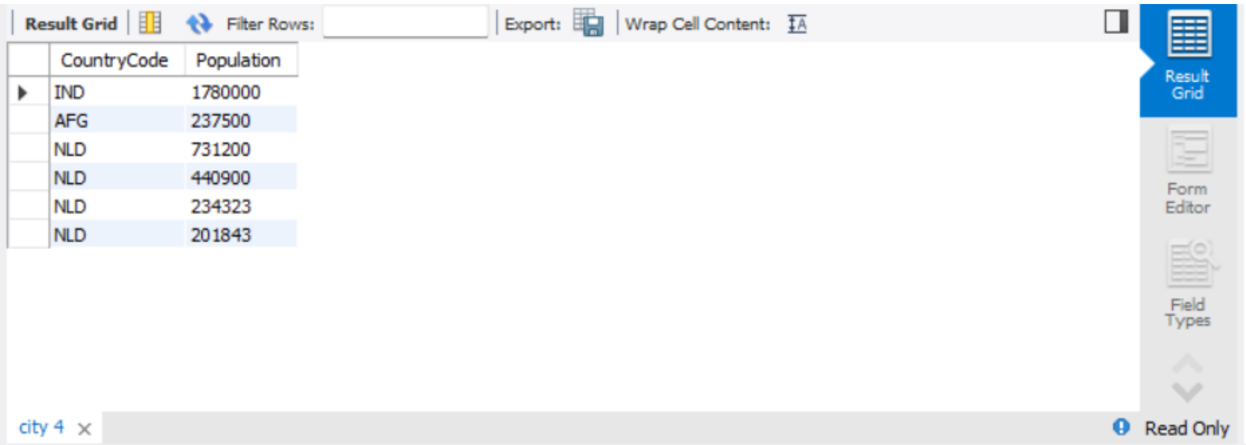
District
Kabol
Qandahar
Herat
Balkh
Noord-Holland
Zuid-Holland
Utrecht
Noord-Brabant
Groningen
Gelderland
Overijssel
Flevoland

3. SELECT * FROM world.city WHERE Population > 1780000;



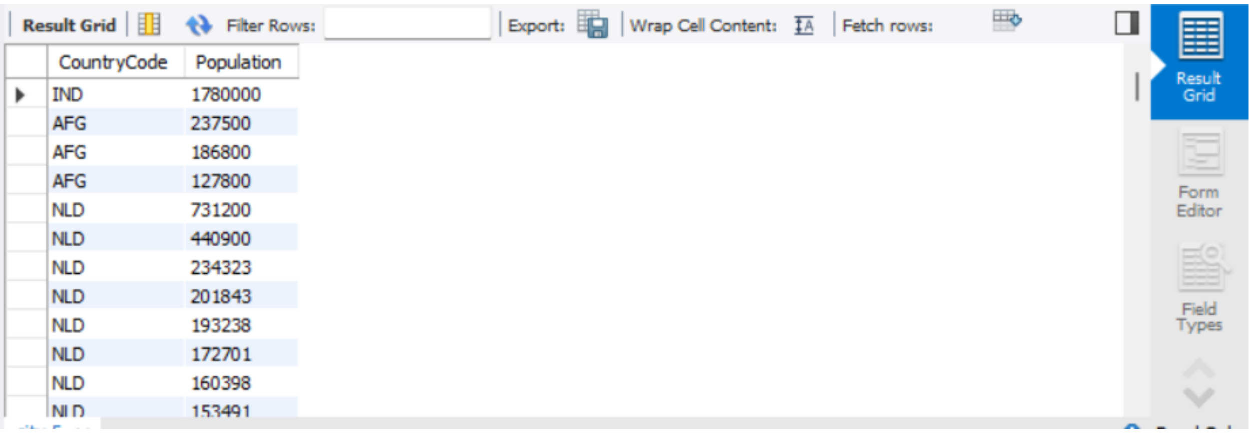
	ID	Name	CountryCode	District	Population
▶	35	Alger	DZA	Alger	2168000
	56	Luanda	AGO	Luanda	2022000
	69	Buenos Aires	ARG	Distrito Federal	2982146
	130	Sydney	AUS	New South Wales	3276207
	131	Melbourne	AUS	Victoria	2865329
	144	Baku	AZE	Baki	1787800
	150	Dhaka	BGD	Dhaka	3612850
	206	SÃ£o Paulo	BRA	SÃ£o Paulo	9968485
	207	Rio de Janeiro	BRA	Rio de Janeiro	5598953
	208	Salvador	BRA	Bahia	2302832
	209	Belo Horizonte	BRA	Minas Gerais	2139125
	210	Fortaleza	BRA	CearÃ¡	2097757

4. SELECT CountryCode, Population FROM world.city WHERE Population > 200000 AND ID < 30;



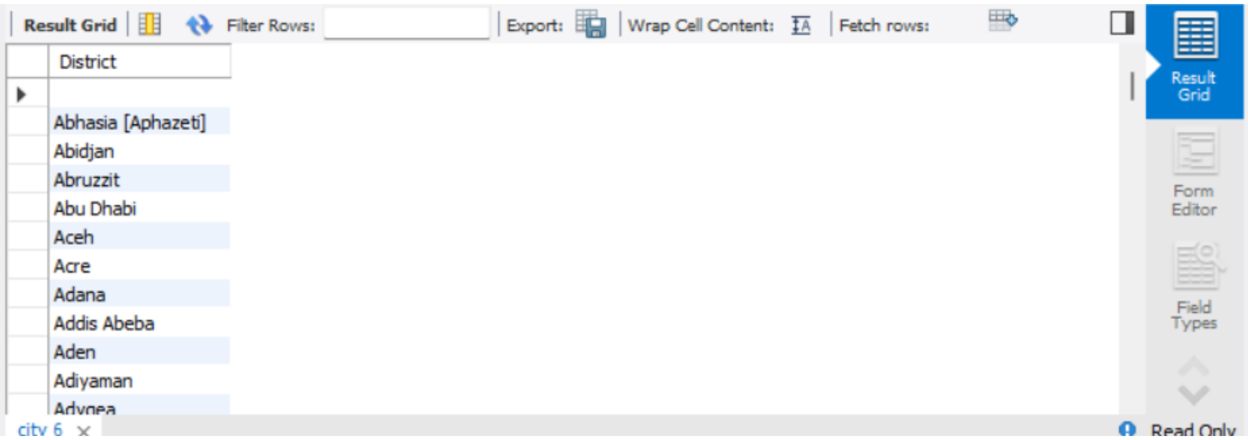
	CountryCode	Population
▶	IND	1780000
	AFG	237500
	NLD	731200
	NLD	440900
	NLD	234323
	NLD	201843

5. SELECT CountryCode, Population FROM world.city WHERE Population > 200000 OR ID < 30;



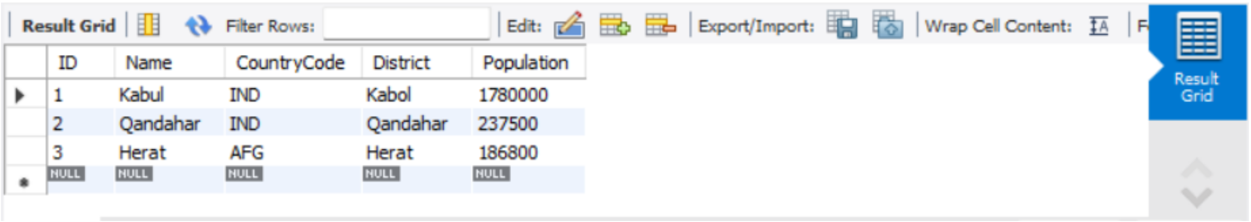
	CountryCode	Population
▶	IND	1780000
	AFG	237500
	AFG	186800
	AFG	127800
	NLD	731200
	NLD	440900
	NLD	234323
	NLD	201843
	NLD	193238
	NLD	172701
	NLD	160398
	NLD	153491

6. SELECT DISTINCT District FROM world.city ORDER BY District;



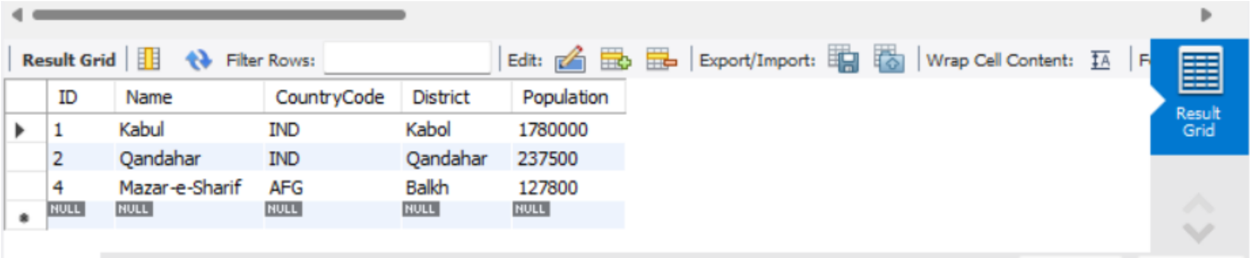
District
Abhasia [Aphazeti]
Abidjan
Abruzzit
Abu Dhabi
Aceh
Acre
Adana
Addis Abeba
Aden
Adiyaman
Adygea

7. INSERT INTO world.city (ID,Name,CountryCode,District,Population) VALUES (100355, 'New', 'IND', 'Sant Ramdas', 200000);
8. UPDATE world.city SET CountryCode = 'IND' WHERE ID = 2;



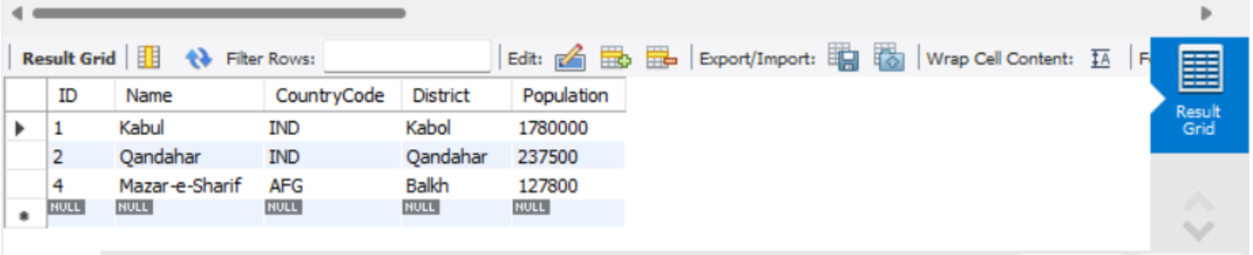
ID	Name	CountryCode	District	Population
1	Kabul	IND	Kabol	1780000
2	Qandahar	IND	Qandahar	237500
3	Herat	AFG	Herat	186800
NULL	NULL	NULL	NULL	NULL

9. DELETE FROM world.city WHERE ID = 3;



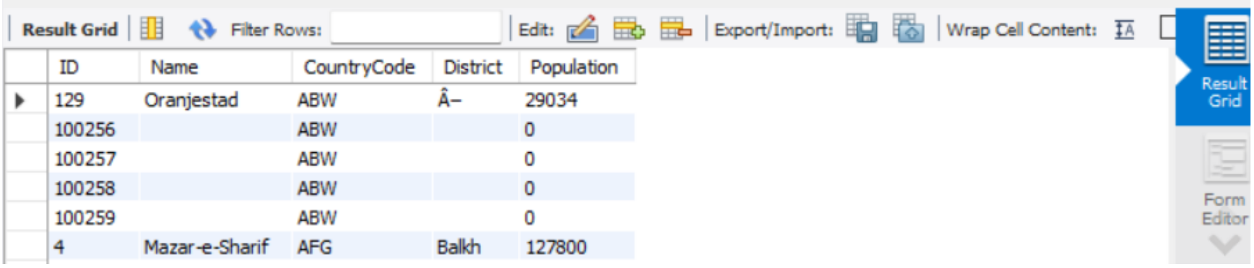
ID	Name	CountryCode	District	Population
1	Kabul	IND	Kabol	1780000
2	Qandahar	IND	Qandahar	237500
4	Mazar-e-Sharif	AFG	Balkh	127800
NULL	NULL	NULL	NULL	NULL

10. SELECT * FROM world.city LIMIT 3;



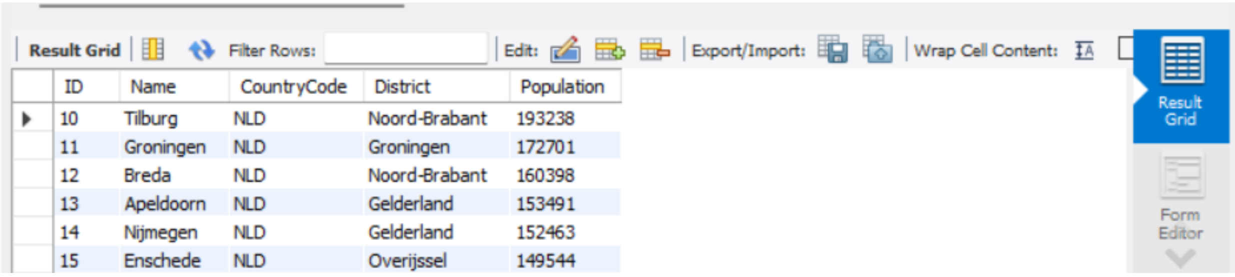
ID	Name	CountryCode	District	Population
1	Kabul	IND	Kabol	1780000
2	Qandahar	IND	Qandahar	237500
4	Mazar-e-Sharif	AFG	Balkh	127800
NULL	NULL	NULL	NULL	NULL

11. SELECT * FROM world.city WHERE CountryCode LIKE 'A%';



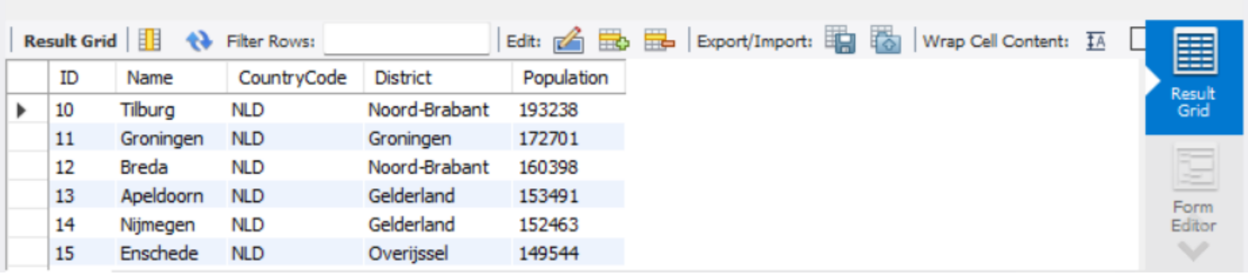
ID	Name	CountryCode	District	Population
129	Oranjestad	ABW	Â–	29034
100256		ABW		0
100257		ABW		0
100258		ABW		0
100259		ABW		0
4	Mazar-e-Sharif	AFG	Balkh	127800

12. SELECT * FROM world.city WHERE CountryCode IN ('DZA', 'IND', 'ARG');



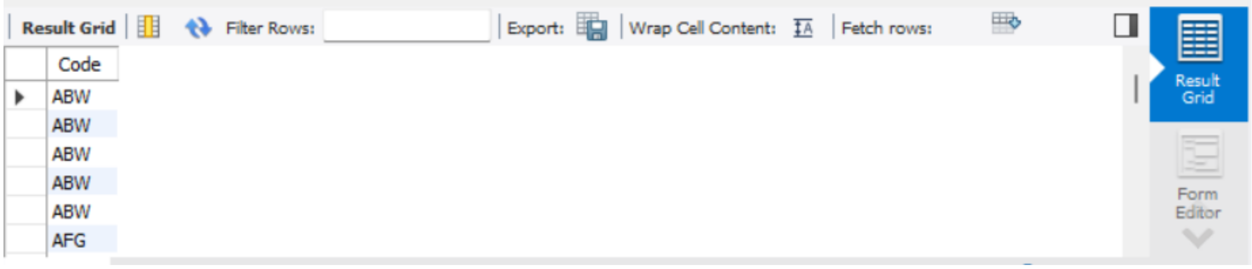
ID	Name	CountryCode	District	Population
10	Tilburg	NLD	Noord-Brabant	193238
11	Groningen	NLD	Groningen	172701
12	Breda	NLD	Noord-Brabant	160398
13	Apeldoorn	NLD	Gelderland	153491
14	Nijmegen	NLD	Gelderland	152463
15	Enschede	NLD	Overijssel	149544

13. SELECT * FROM world.city WHERE ID BETWEEN 10 AND 20;



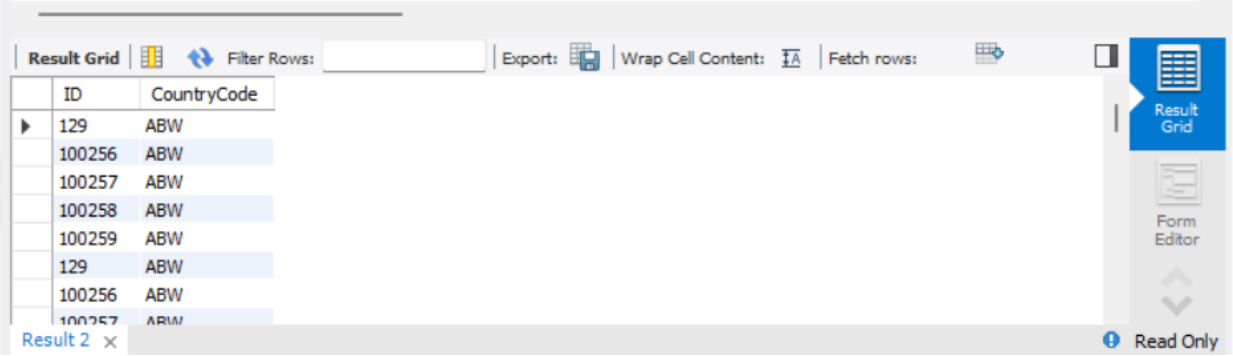
ID	Name	CountryCode	District	Population
10	Tilburg	NLD	Noord-Brabant	193238
11	Groningen	NLD	Groningen	172701
12	Breda	NLD	Noord-Brabant	160398
13	Apeldoorn	NLD	Gelderland	153491
14	Nijmegen	NLD	Gelderland	152463
15	Enschede	NLD	Overijssel	149544

14. SELECT CountryCode AS Code FROM world.city;



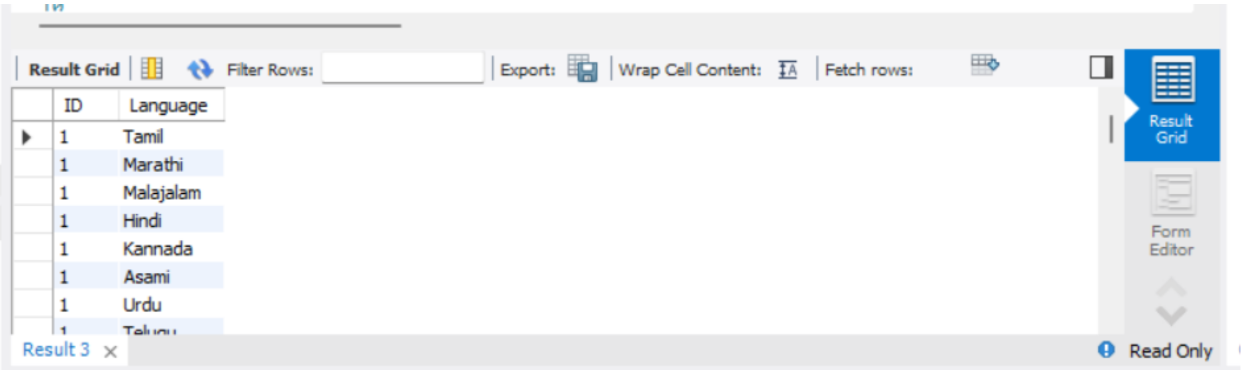
Code
ABW
ABW
ABW
ABW
ABW
AFG

15. SELECT world.city.ID, world.city.CountryCode FROM world.city INNER JOIN world.countrylanguage ON world.city.CountryCode = world.countrylanguage.CountryCode;



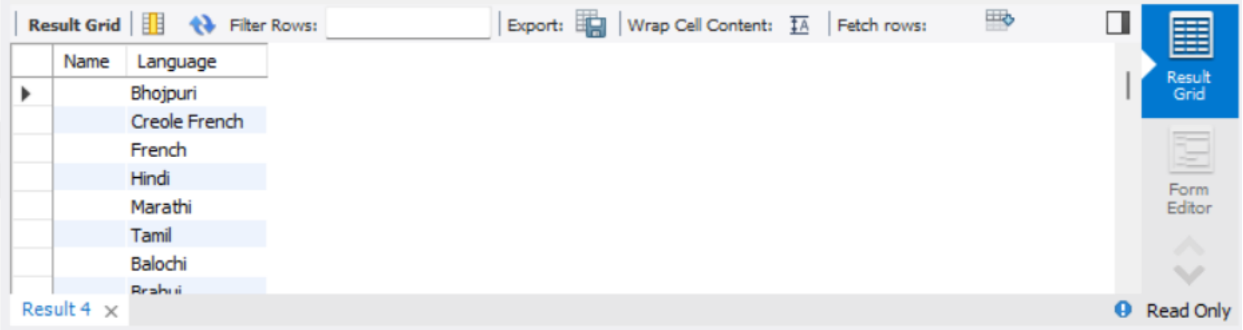
ID	CountryCode
129	ABW
100256	ABW
100257	ABW
100258	ABW
100259	ABW
129	ABW
100256	ABW
100257	ABW

16. SELECT world.city.ID, world.countrylanguage.Language FROM world.countrylanguage LEFT JOIN world.city ON world.city.CountryCode = world.countrylanguage.CountryCode ORDER BY world.city.ID;



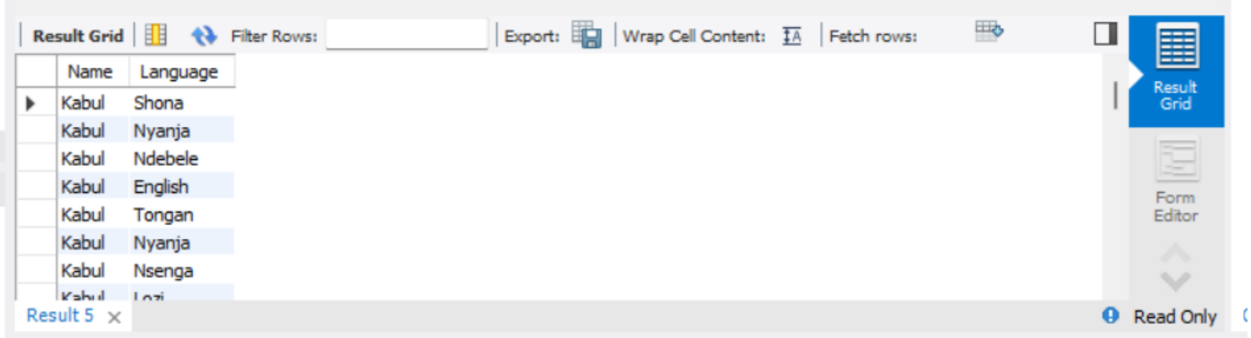
ID	Language
1	Tamil
1	Marathi
1	Malajalam
1	Hindi
1	Kannada
1	Asami
1	Urdu
1	Telugu

17. SELECT world.city.Name, world.countrylanguage.Language FROM world.countrylanguage Right JOIN world.city ON world.city.CountryCode = world.countrylanguage.CountryCode ORDER BY world.city.Name;



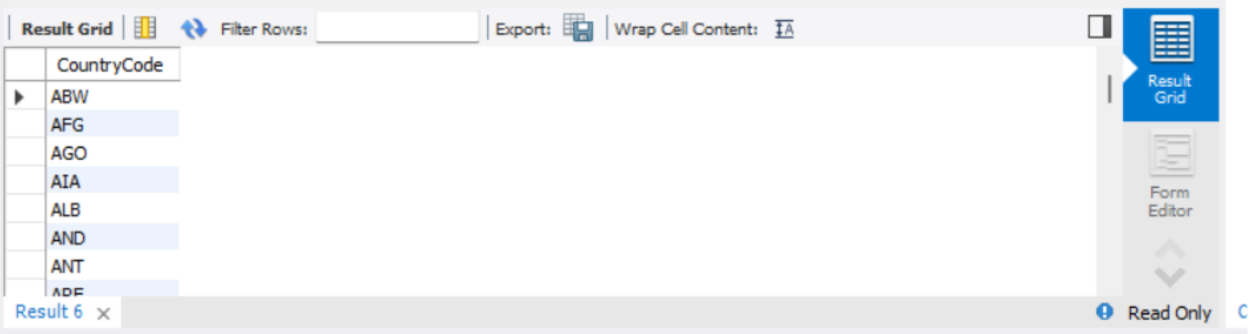
Name	Language
	Bhojpuri
	Creole French
	French
	Hindi
	Marathi
	Tamil
	Balochi
	Brahui

18. SELECT world.city.Name, world.countrylanguage.Language FROM world.countrylanguage CROSS JOIN world.city;



Name	Language
Kabul	Shona
Kabul	Nyanja
Kabul	Ndebele
Kabul	English
Kabul	Tongan
Kabul	Nyanja
Kabul	Nsenga
Kabul	Lozi

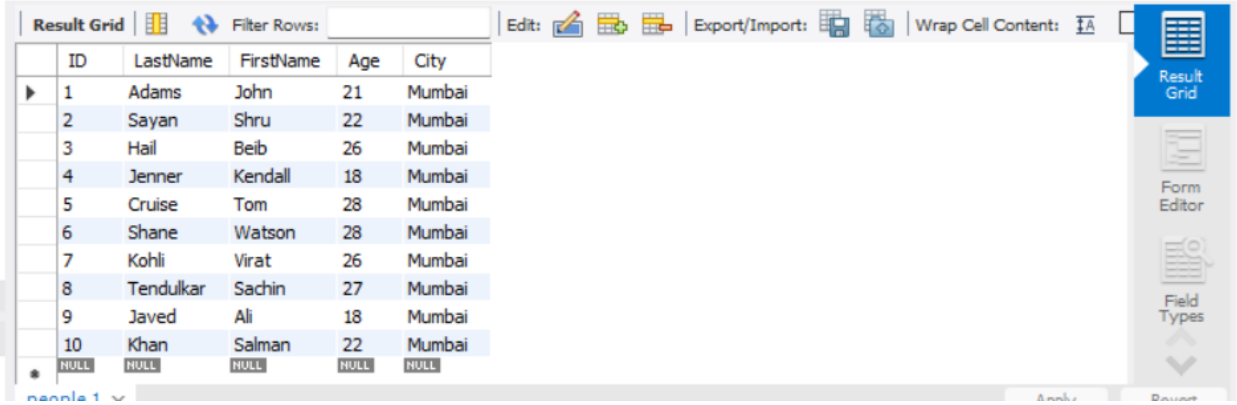
```
19. SELECT world.countrylanguage.CountryCode FROM world.countrylanguage UNION
    SELECT world.city.CountryCode FROM world.city;
```



CountryCode
ABW
AFG
AGO
AIA
ALB
AND
ANT
ARE

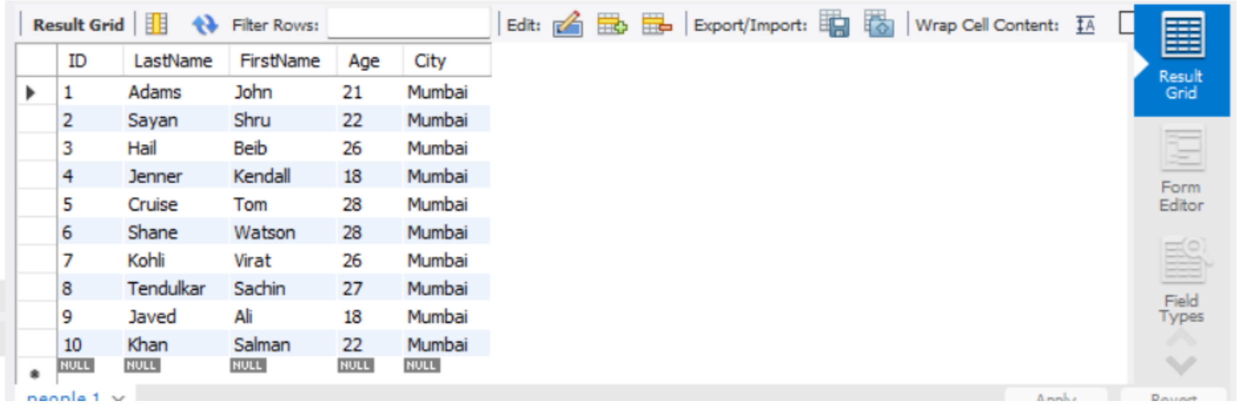
```
20. CREATE DATABASE training;
21. CREATE TABLE training.Persons (
        PersonID int,
        LastName varchar(255),
        FirstName varchar(255),
        Address varchar(255),
        City varchar(255)
    );
22. CREATE TABLE people (
        ID int NOT NULL,
        LastName varchar(255) NOT NULL,
        FirstName varchar(255),
        Age int,
        PRIMARY KEY (ID)
    );


23. ALTER TABLE people ALTER City SET DEFAULT 'Mumbaii';
    Select * from people;
```



ID	LastName	FirstName	Age	City
1	Adams	John	21	Mumbai
2	Sayan	Shru	22	Mumbai
3	Hail	Beib	26	Mumbai
4	Jenner	Kendall	18	Mumbai
5	Cruise	Tom	28	Mumbai
6	Shane	Watson	28	Mumbai
7	Kohli	Virat	26	Mumbai
8	Tendulkar	Sachin	27	Mumbai
9	Javed	Ali	18	Mumbai
10	Khan	Salman	22	Mumbai
NULL	NULL	NULL	NULL	NULL

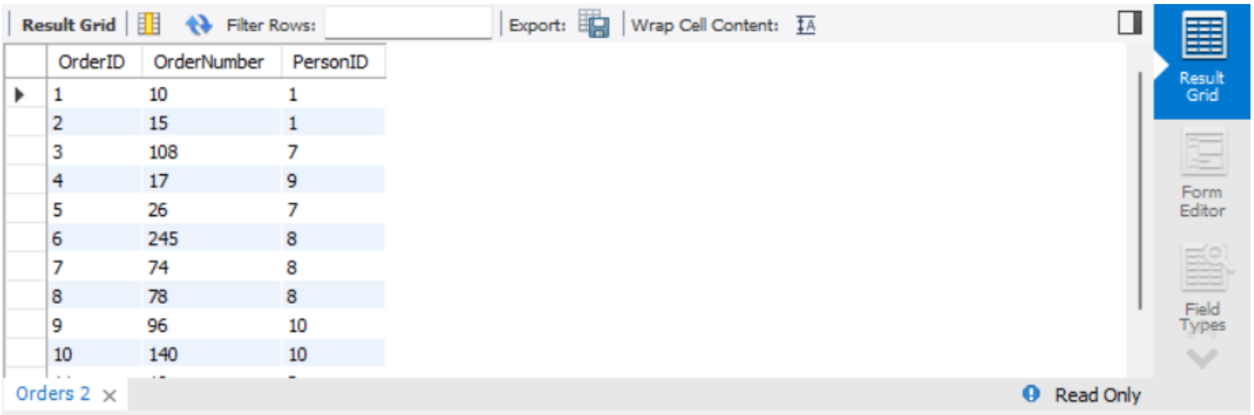
24. INSERT INTO people (ID,LastName,FirstName,Age) VALUES (1, 'Adams', 'John', 21);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (2,'Sayan', 'Shru', 22);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (3,'Hail', 'Beib', 26);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (4,'Jenner', 'Kendall', 18);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (5,'Cruise', 'Tom', 28);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (6,'Shane', 'Watson', 28);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (7,'Kohli', 'Virat', 26);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (8,'Tendulkar', 'Sachin', 27);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (9,'Javed', 'Ali', 18);
    INSERT INTO people (ID,LastName,FirstName,Age) VALUES (10,'Khan', 'Salman', 22);



ID	LastName	FirstName	Age	City
1	Adams	John	21	Mumbai
2	Sayan	Shru	22	Mumbai
3	Hail	Beib	26	Mumbai
4	Jenner	Kendall	18	Mumbai
5	Cruise	Tom	28	Mumbai
6	Shane	Watson	28	Mumbai
7	Kohli	Virat	26	Mumbai
8	Tendulkar	Sachin	27	Mumbai
9	Javed	Ali	18	Mumbai
10	Khan	Salman	22	Mumbai
NULL	NULL	NULL	NULL	NULL

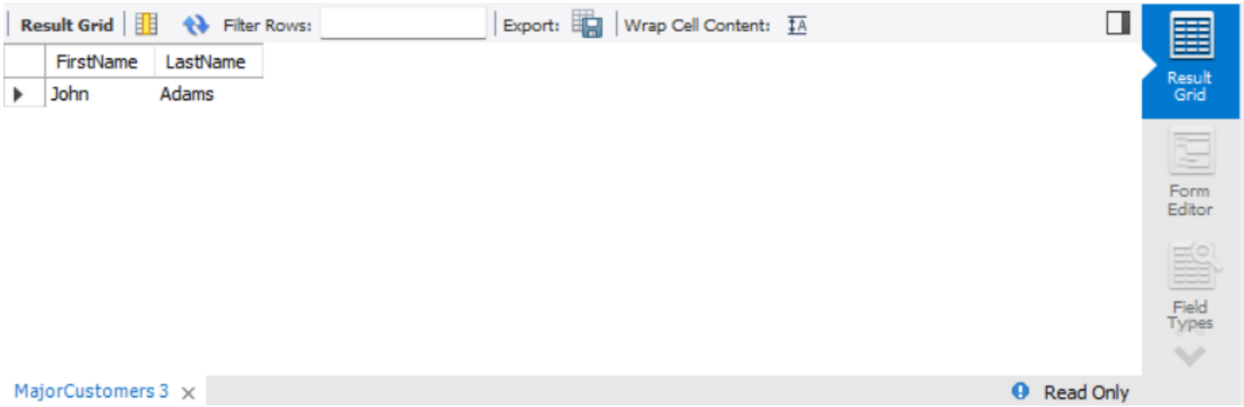
25. CREATE TABLE Orders (
       OrderID int NOT NULL,
       OrderNumber int NOT NULL,
       PersonID int,
       FOREIGN KEY (PersonID) REFERENCES people(ID) ON UPDATE CASCADE
          ON DELETE CASCADE);
26. ALTER TABLE Orders ADD PRIMARY KEY (OrderID);
27. CREATE INDEX idx_OrderNumber ON Orders (OrderNumber);
28. ALTER TABLE Orders AUTO_INCREMENT=100;
    INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (1,10,1);
    INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (2,15,1);
    INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (3,108,7);

```
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (4,17,9);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (5,26,7);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (6,245,8);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (7,74,8);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (8,78,8);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (9,96,10);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (10,140,10);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (11,19,2);
INSERT INTO Orders (OrderID,OrderNumber,PersonID) VALUES (12,45,2);
```



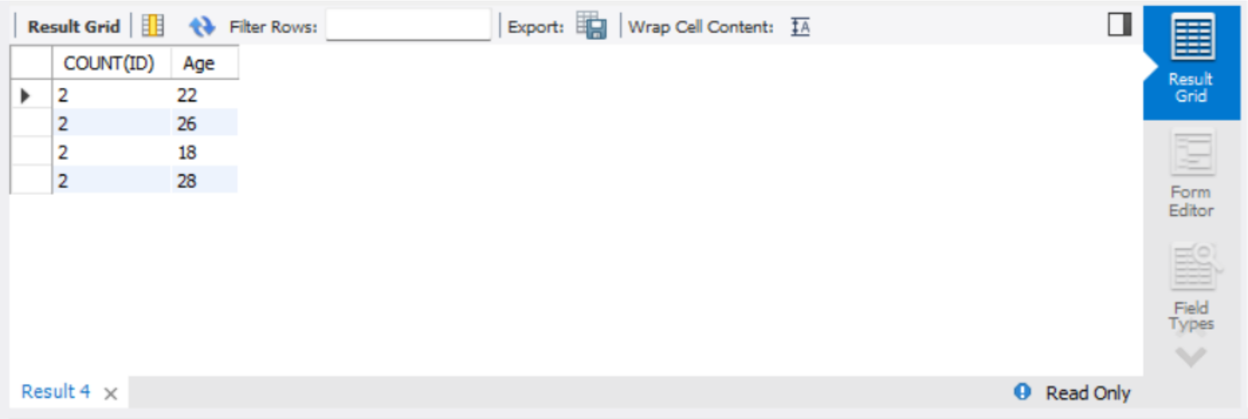
OrderID	OrderNumber	PersonID
1	10	1
2	15	1
3	108	7
4	17	9
5	26	7
6	245	8
7	74	8
8	78	8
9	96	10
10	140	10

```
29. CREATE VIEW MajorCustomers AS
    SELECT FirstName, LastName
    FROM people
    WHERE Age < 21;
```



FirstName	LastName
John	Adams

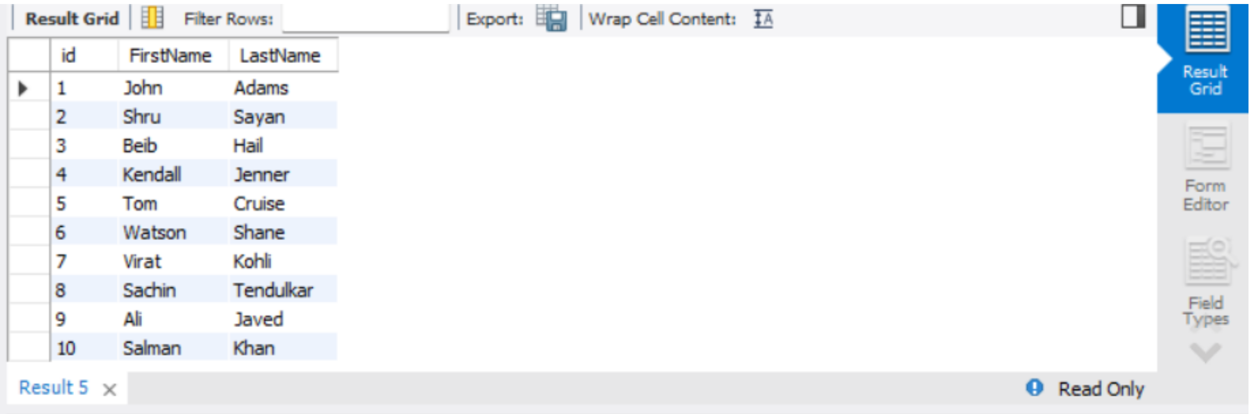
```
30. SELECT COUNT(ID), Age
    FROM people
    GROUP BY Age
    HAVING COUNT(ID) > 1;
```



COUNT(ID)	Age
2	22
2	26
2	18
2	28

31. DELIMITER $$

```
CREATE PROCEDURE candidates(IN ID INT)
BEGIN
        SELECT people.id, people.FirstName,people.LastName
        FROM people
        INNER JOIN Orders ON people.id = Orders.OrderID;
   END$$
DELIMITER ;
CALL candidates(1);
```



id	FirstName	LastName
1	John	Adams
2	Shru	Sayan
3	Beib	Hail
4	Kendall	Jenner
5	Tom	Cruise
6	Watson	Shane
7	Virat	Kohli
8	Sachin	Tendulkar
9	Ali	Javed
10	Salman	Khan

32. 1st Normalization Form

```
Create table normalization(Employee varchar(255),Age int,Dept varchar(255));
INSERT INTO normalization (Employee ,Age,Dept) VALUES ('Alice',21, 'Marketing' );
INSERT INTO normalization (Employee ,Age,Dept) VALUES ('Alice',21, 'Sales' );
INSERT INTO normalization (Employee ,Age,Dept) VALUES ('ALex',23, 'Finance' );
INSERT INTO normalization (Employee ,Age,Dept) VALUES ('Alex',23, 'Investment
Banking' );
```

33. 2nd Normalization Form

```
Create table emp(empid int,Age int,Employee varchar(255));
ALTER TABLE emp
```

```
ADD PRIMARY KEY (empid);
Create table dept(dept_id int,Dept varchar(255));
ALTER TABLE dept
ADD PRIMARY KEY (dept_id);
Create table details(details_id int,dept_id int,empid int,FOREIGN KEY (dept_id)
REFERENCES dept(dept_id),FOREIGN KEY (empid) REFERENCES emp(empid));
```

34. 3rd Normalization Form

```
CREATE TABLE ADDRESS(
  ZIP          VARCHAR(12),
  STREET       VARCHAR(200),
  CITY         VARCHAR(100),
  STATE        VARCHAR(100),
  PRIMARY KEY (ZIP)
);

CREATE TABLE CUSTOMERS(
  CUST_ID      INT            NOT NULL,
  CUST_NAME    VARCHAR (20)   NOT NULL,
  DOB          DATE,
  ZIP          VARCHAR(12),
  EMAIL_ID     VARCHAR(256),
  PRIMARY KEY (CUST_ID)
);
```

35. BCNF

```
create table Student(
        Student_id int,
   Prof_id int,
   FOREIGN KEY (Prof_id) REFERENCES Professor(Prof_id),
   PRIMARY KEY (Student_id));
Create table Professor(
Prof_id int NOT NULL,
Professor varchar(255),
Subjects varchar(255),
PRIMARY KEY(Prof_id)
);
```