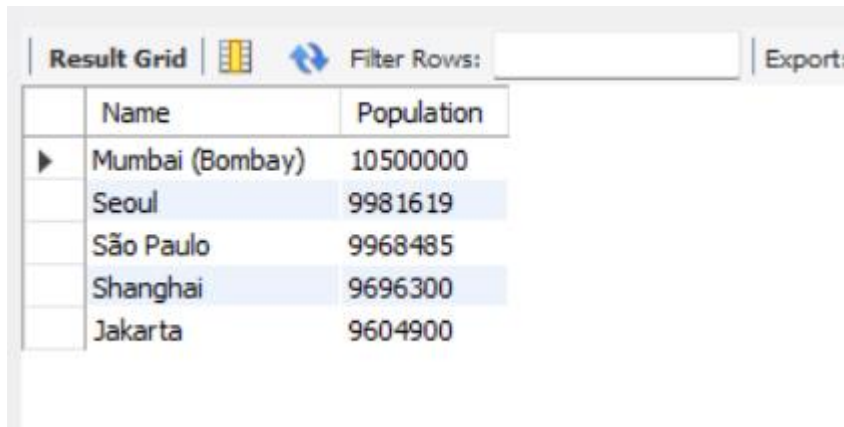


EXTRACTING AND ANALYZING DATA FROM DATASET

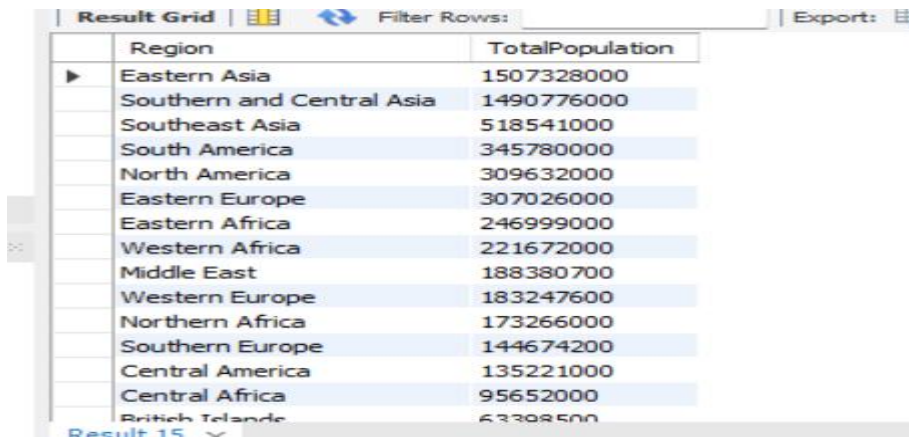
Here is the detailed observation of the SQL commands and the screenshots of the results, along with the steps we followed to perform the work.

```
-- Top 5 most populous cities
SELECT Name, Population
FROM city
ORDER BY Population DESC
LIMIT 5;
```



	Name	Population
▶	Mumbai (Bombay)	10500000
	Seoul	9981619
	São Paulo	9968485
	Shanghai	9696300
	Jakarta	9604900

```
-- COUNTRY WITH POPULATION MORE THAN 10000 IN ASCENDING ORDER
SELECT Name, Population
From city
where Population>10000
ORDER BY Population asc
LIMIT 10;
```



	Region	TotalPopulation
▶	Eastern Asia	1507328000
	Southern and Central Asia	1490776000
	Southeast Asia	518541000
	South America	345780000
	North America	309632000
	Eastern Europe	307026000
	Eastern Africa	246999000
	Western Africa	221672000
	Middle East	188380700
	Western Europe	183247600
	Northern Africa	173266000
	Southern Europe	144674200
	Central America	135221000
	Central Africa	95652000
	British Islands	63398500

```
-- Population by region
SELECT Region, SUM(Population) AS TotalPopulation
FROM country
GROUP BY Region
ORDER BY TotalPopulation DESC;
```

Result Grid			Filter Rows:	Export:
	Region	TotalPopulation		
▶	Eastern Asia	1507328000		
	Southern and Central Asia	1490776000		
	Southeast Asia	518541000		
	South America	345780000		
	North America	309632000		
	Eastern Europe	307026000		
	Eastern Africa	246999000		
	Western Africa	221672000		
	Middle East	188380700		
	Western Europe	183247600		
	Northern Africa	173266000		
	Southern Europe	144674200		
	Central America	135221000		
	Central Africa	95652000		
	British Islands	63308500		

Result 15 x

```
-- INNER JOIN: List cities with their country names
SELECT city.Name AS City, country.Name AS Country
FROM city
INNER JOIN country ON city.CountryCode = country.Code ;
```

Result Grid			Filter Rows:
	City	Country	
▶	Oranjestad	Aruba	
	Kabul	Afghanistan	
	Qandahar	Afghanistan	
	Herat	Afghanistan	
	Mazar-e-Sharif	Afghanistan	
	Luanda	Angola	
	Huambo	Angola	
	Lobito	Angola	
	Benguela	Angola	
	Namibe	Angola	
	South Hill	Anguilla	
	The Valley	Anguilla	
	Tirana	Albania	
	Andorra la Vella	Andorra	
	Willemstad	Netherlands	

Result 16 x

```
-- LEFT JOIN: All countries and their capital city name (if exists)
SELECT country.Name, city.Name AS Capital
FROM country
LEFT JOIN city ON country.Capital = city.ID;
```

Result Grid | Filter Rows:

	Name	Capital
▶	Aruba	Oranjestad
	Afghanistan	Kabul
	Angola	Luanda
	Anguilla	The Valley
	Albania	Tirana
	Andorra	Andorra la Vella
	Netherlands Antilles	Willemstad
	United Arab Emirates	Abu Dhabi
	Argentina	Buenos Aires
	Armenia	Yerevan
	American Samoa	Fagatogo
	Antarctica	NULL
	French Southern ter...	NULL
	Antigua and Barbuda	Saint John's
	Australia	Canberra

Result 17 ×

```
-- RIGHT JOIN: Languages used in countries (if your DB supports RIGHT JOIN)
SELECT l.Language, c.Name AS Country
FROM country c
RIGHT JOIN countrylanguage l ON c.Code = l.CountryCode;
```

	Language	Country
▶	Dutch	Aruba
	English	Aruba
	Papiamentu	Aruba
	Spanish	Aruba
	Balochi	Afghanistan
	Dari	Afghanistan
	Pashto	Afghanistan
	Turkmenian	Afghanistan
	Uzbek	Afghanistan
	Ambo	Angola
	Chokwe	Angola
	Kongo	Angola
	Luchazi	Angola
	Luimbe-ng...	Angola
	Luvale	Angola

Result 19 ×

```
-- Countries with population above the average
SELECT Name
FROM country
WHERE Population > (
    SELECT AVG(Population) FROM country
);
```

rname
Argentina
Bangladesh
Brazil
Canada
China
Congo, The Democratic Republic of the
Colombia
Germany
Algeria
Egypt
Spain
Ethiopia
France
United Kingdom
Indonesia

```
-- Average population per continent
SELECT Continent, AVG(Population) AS AvgPopulation
FROM country
GROUP BY Continent;
```

Continent	AvgPopulation
North America	13053864.8649
Asia	72647562.7451
Africa	13525431.0345
Europe	15871186.9565
South America	24698571.4286
Oceania	1085755.3571
Antarctica	0.0000

```
-- Total GNP by continent
SELECT Continent, SUM(GNP) AS TotalGNP
FROM country
GROUP BY Continent;
```

Continent	TotalGNP
North America	9688627.20
Asia	7655392.00
Africa	580375.00
Europe	9498865.00
South America	1511874.00
Oceania	419774.70
Antarctica	0.00

```
-- View of official languages per country
DROP VIEW IF EXISTS official_languages;
```

```
CREATE OR REPLACE VIEW official_languages AS
SELECT c.Name AS Country, l.Language
FROM country c
JOIN countrylanguage l ON c.Code = l.CountryCode
WHERE l.IsOfficial = 'T';
```

Country	Language
Aruba	Dutch
Afghanistan	Dari
Afghanistan	Pashto
Anguilla	English
Albania	Albaniana
Andorra	Catalan
Netherlands Antilles	Dutch

fficial_languages2 x

utput