



World Population (1970-2022) Analysis using SQL

- 1) Created Database **world_population** by the help of **creating schema** and importing the csv into that database. Table name is created as **world_population** and now checking the data.

World Population(1970-2022)

```

1 • USE world_population;
2
3 • SELECT * FROM world_population;
4

```

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

	Rank	CCA3	Country/Territory	Capital	Continent	2022 Population	2020 Population	2015 Population	2010 Population	2000 Population
▶	36	AFG	Afghanistan	Kabul	Asia	41128771	38972230	33753499	28189672	19542982
	138	ALB	Albania	Tirana	Europe	2842321	2866849	2882481	2913399	3182021
	34	DZA	Algeria	Algiers	Africa	44903225	43451666	39543154	35856344	30774621
	213	ASM	American Samoa	Pago Pago	Oceania	44273	46189	51368	54849	58230
	203	AND	Andorra	Andorra la Vella	Europe	79824	77700	71746	71519	66097
	42	AGO	Angola	Luanda	Africa	35588987	33428485	28127721	23364185	16394062
	224	AIA	Anguilla	The Valley	North America	15857	15585	14525	13172	11047
	201	ATG	Antigua and Barbuda	Saint John's	North America	93763	92664	89941	85695	75055
	33	ARG	Argentina	Buenos Aires	South America	45510318	45036032	43257065	41100123	37070774
	140	ARM	Armenia	Yerevan	Asia	2780469	2805608	2878595	2946293	3168523
	198	ABW	Aruba	Oranjestad	North America	106445	106585	104257	100341	89101
	55	AUS	Australia	Canberra	Oceania	26177413	25670051	23820236	22019168	19017963

Form Editor | Field Types | Query Stats

- 2) Total rows in this table **world_population** are **234** rows.

World Population(1970-2022)*

```

1 • USE world_population;
2
3 • SELECT Count(*) as Total_Rows FROM world_population;
4
5

```

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

	Total_Rows
▶	234

NOW STARTING THE DATA ANALYSIS BY WRITING QUERIES

1. Total countries by Continent:

The screenshot shows a SQL query editor with the following query:

```
1 • USE world_population;  
2  
3 • SELECT * FROM world_population;  
4  
5 • SELECT Continent, COUNT(Country) AS Number_Of_Countries  
6 FROM world_population  
7 GROUP BY Continent  
8 ORDER BY Number_Of_Countries DESC;  
9  
10
```

The result grid displays the following data:

Continent	Number_Of_Countries
Africa	57
Asia	50
Europe	50
North America	40
Oceania	23
South America	14

2. Highest 2022 population:

The screenshot shows a SQL query editor with the following query:

```
2  
3 • SELECT * FROM world_population;  
4  
5 • SELECT Continent, COUNT(Country) AS Number_Of_Countries  
6 FROM world_population  
7 GROUP BY Continent  
8 ORDER BY Number_Of_Countries DESC;  
9  
10 • SELECT * FROM world_population ORDER BY `2022 Population` DESC LIMIT 1;  
11
```

The result grid displays the following data:

Rank	CCA3	Country	Capital	Continent	2022 Population	2020 Population	2015 Population	2010 Population	2000 Population	1990 Population	1980 Population	1970 Population	Area (km ²)
1	CHN	China	Beijing	Asia	1425887337	1424929781	1393715448	1348191368	1264099069	1153704252	982372466	822534450	9706961

3. Highest Populated Countries in Asia:

World Population(1970-2022)*

```
5 • SELECT Continent, COUNT(Country) AS Number_Of_Countries
6 FROM world_population
7 GROUP BY Continent
8 ORDER BY Number_Of_Countries DESC;
9
10 • SELECT * FROM world_population ORDER BY `2022 Population` DESC LIMIT 1;
11
12 • SELECT * FROM world_population WHERE Continent = 'Asia'
13 ORDER BY `Rank` ASC;
14
```

Result Grid

	Rank	CCA3	Country	Capital	Continent	2022 Population	2020 Population	2015 Population	2010 Population	2000 Population	1990 Population	1980 Population	1970 Population	Area (km²)
▶	1	CHN	China	Beijing	Asia	1425887337	1424929781	1393715448	1348191368	1264099069	1153704252	982372466	822534450	9704
	2	IND	India	New Delhi	Asia	1417173173	1396387127	1322866505	1240613620	1059633675	870452165	696828385	557501301	328
	4	IDN	Indonesia	Jakarta	Asia	275501339	271857970	259091970	244016173	214072421	182159874	148177096	115228394	190
	5	PAK	Pakistan	Islamabad	Asia	235824862	227196741	210969298	194454498	154369924	115414069	80624057	59290872	881
	8	BGD	Bangladesh	Dhaka	Asia	171186372	167420951	157830000	148391139	129193327	107147651	83929765	67541860	147
	11	JPN	Japan	Tokyo	Asia	123951692	125244761	127250933	128105431	126803861	123686321	117624196	105416839	377
	13	PHL	Philippines	Manila	Asia	115559009	112190977	103031365	94636700	77958223	61558898	48419546	37435586	342
	16	VNM	Vietnam	Hanoi	Asia	98186956	96686956	97101708	87411017	70901147	66017613	57068770	41078940	331

4. Top 5 Average population in 2022:

World Population(1970-2022)*

```
10 • SELECT * FROM world_population ORDER BY `2022 Population` DESC LIMIT 1;
11
12 • SELECT * FROM world_population WHERE Continent = 'Asia'
13 ORDER BY `Rank` ASC;
14
15 • SELECT Continent, AVG(`2022 Population`) as Avg_population
16 FROM world_population
17 GROUP BY Continent
18 ORDER BY Avg_population DESC LIMIT 5;
19
```

Result Grid

	Continent	Avg_population
▶	Asia	94427665.4800
	South America	31201186.2857
	Africa	25030367.2281
	North America	15007403.4000
	Europe	14862950.7600

5. Top 5 Countries by Density per km:

World Population(1970-2022)*

```
13 ORDER BY `Rank` ASC;
14
15 • SELECT Continent, AVG(`2022 Population`) as Avg_population
16 FROM world_population
17 GROUP BY Continent
18 ORDER BY Avg_population DESC LIMIT 5;
19
20 • SELECT `Rank`,Continent,Country,`2022 Population`,`World Population Percentage`,`Density (per km²)` FROM world_population
21 ORDER BY `Density (per km²)` DESC LIMIT 5;
22
```

Result Grid

	Rank	Continent	Country	2022 Population	World Population Percentage	Density (per km²)
▶	167	Asia	Macau	695168	0.01	23172.2667
	217	Europe	Monaco	36469	0	18234.5
	113	Asia	Singapore	5975689	0.07	8416.4634
	104	Asia	Hong Kong	7488865	0.09	6783.3922
	219	Europe	Gibraltar	32649	0	5441.5

6. Top Growth Rate:

World Population(1970-2022)*

```
20 • SELECT `Rank`,Continent,Country,`2022 Population`,`World Population Percentage`,`Density (per kmÂ²)` FROM world_population
21 ORDER BY `Density (per kmÂ²)` DESC LIMIT 5;
22
23 • SELECT `Rank`,Continent,Country,`2022 Population`,`World Population Percentage`,`Growth Rate` FROM world_population
24 WHERE `Growth Rate` > 1
25 ORDER BY `Growth Rate` DESC;
26
27
28
```

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

	Rank	Continent	Country	2022 Population	World Population Percentage	Growth Rate
▶	135	Europe	Moldova	3272996	0.04	1.0691
	37	Europe	Poland	39857145	0.5	1.0404
	54	Africa	Niger	26207977	0.33	1.0378
	60	Asia	Syria	22125249	0.28	1.0376
	116	Europe	Slovakia	5643453	0.07	1.0359
	15	Africa	DR Congo	99010212	1.24	1.0325
	182	Africa	Mayotte	326101	0	1.0319
	69	Africa	Chad	17723315	0.22	1.0316
	42	Africa	Angola	35589987	0.45	1.0315
	59	Africa	Mali	22593590	0.28	1.0314
	70	Africa	Somalia	17597511	0.22	1.0312
	31	Africa	Uganda	47249585	0.59	1.0304
	22	Africa	Tanzania	65497748	0.82	1.03

world_population36 x

Read Only

7. Continent & Country by High Population:

World Population(1970-2022)*

```
24 WHERE `Growth Rate` > 1
25 ORDER BY `Growth Rate` DESC;
26
27 • SELECT Continent, Country, SUM(`2022 Population`) AS Total_population
28 FROM world_population
29 GROUP BY Continent, Country
30 ORDER BY Total_population DESC;
31
32
```

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

	Continent	Country	Total_population
▶	Asia	China	1425887337
	Asia	India	1417173173
	North America	United States	338289857
	Asia	Indonesia	275501339
	Asia	Pakistan	235824862
	Africa	Nigeria	218541212
	South America	Brazil	215313498
	Asia	Bangladesh	171186372
	Europe	Russia	144713314
	North America	Mexico	127504125
	Asia	Japan	123951692
	Africa	Ethiopia	123379924
	Asia	Philippines	115559009
	Africa	Egypt	110990103

Result 39 x

Read Only

8. Countries, Population by lowest Area:

World Population(1970-2022)*

```
30 ORDER BY Total_population DESC;
31
32
33 • SELECT Continent, Country, SUM(`2022 Population`) AS Total_population, `Area (km²)`
34 FROM world_population
35 GROUP BY Continent, Country, `Area (km²)`
36 ORDER BY Total_population ASC
37 LIMIT 10;
38
```

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

Continent	Country	Total_population	Area (km²)
Europe	Vatican City	510	1
Oceania	Tokelau	1871	12
Oceania	Niue	1934	260
South America	Falkland Islands	3780	12173
North America	Montserrat	4390	102
North America	Saint Pierre and Miquelon	5862	242
North America	Saint Barthelemy	10967	21
Oceania	Tuvalu	11312	26
Oceania	Wallis and Futuna	11572	142
Oceania	Nauru	12668	21

Result 43 x

9. Countries' Population Greater than 50M and Growth Rate lesser than 1:

World Population(1970-2022)*

```
35 GROUP BY Continent, Country, `Area (km²)`
36 ORDER BY Total_population ASC
37 LIMIT 10;
38
39 • SELECT Continent, Country, SUM(`2022 Population`) AS Total_population, `Growth Rate`, `Area (km²)`
40 FROM world_population
41 WHERE `2022 Population` > 50000000 AND `Growth Rate` < 1
42 GROUP BY Continent, Country, `Area (km²)`, `Growth Rate`;
43
```

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

Continent	Country	Total_population	Growth Rate	Area (km²)
Europe	Germany	83369843	0.9995	357114
Europe	Italy	59037474	0.9966	301336
Asia	Japan	123951692	0.9947	377930
Europe	Russia	144713314	0.9973	17098242
Asia	South Korea	51815810	0.9997	100210

Result 45 x

10. Countries with Highest Growth Rate:

World Population(1970-2022)*

```
40 FROM world_population
41 WHERE `2022 Population` > 50000000 AND `Growth Rate` < 1
42 GROUP BY Continent, Country, `Area (km²)`, `Growth Rate`;
43
44 • SELECT Continent, Country, SUM(`2022 Population`) AS Total_population, `Growth Rate`, `Area (km²)`
45 FROM world_population
46 GROUP BY Continent, Country, `Area (km²)`, `Growth Rate`
47 ORDER BY `Growth Rate` DESC LIMIT 3;
48
```

Result Grid | Filter Rows: | Export: | Wrap Cell Contents: | Fetch rows: |

Continent	Country	Total_population	Growth Rate	Area (km²)
Europe	Moldova	3272996	1.0691	33846
Europe	Poland	39857145	1.0404	312679
Africa	Niger	26207977	1.0378	1267000

Result Grid
Form Editor
Field Types
Query Stats

11. Top 10 Countries' 2022 Population lesser than 2020 Population:

World Population(1970-2022)*

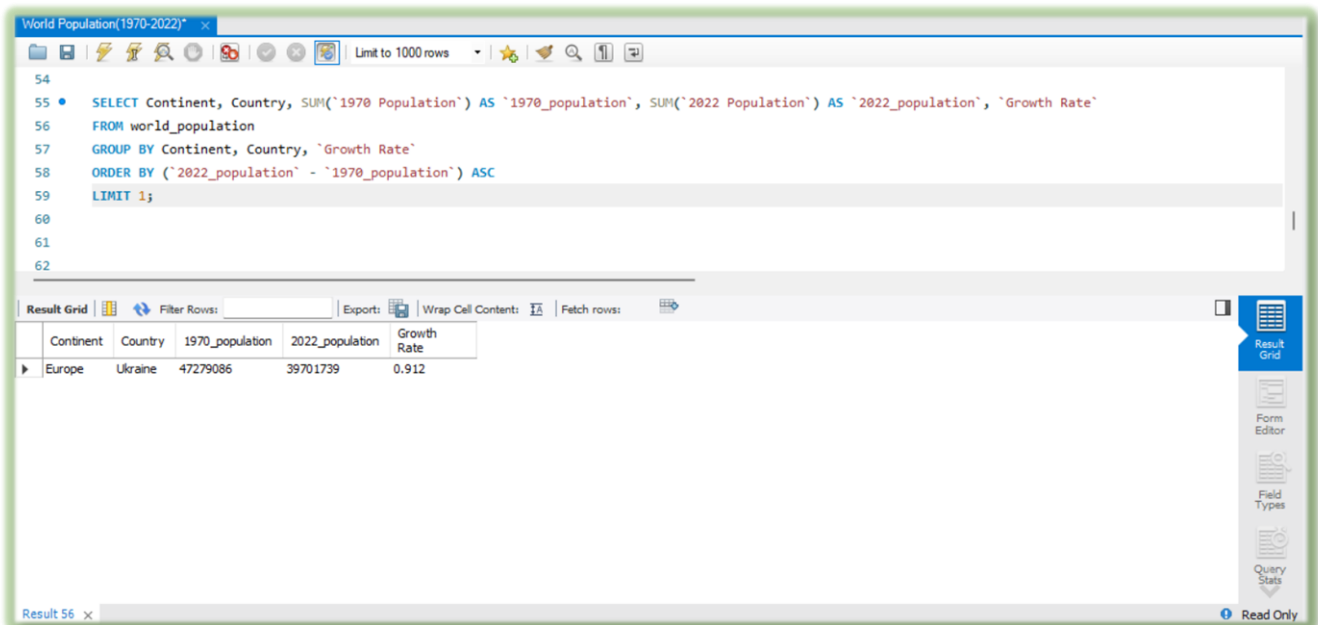
```
46 GROUP BY Continent, Country, `Area (km²)`, `Growth Rate`
47 ORDER BY `Growth Rate` DESC LIMIT 3;
48
49 • SELECT Continent, Country, SUM(`2022 Population`) AS 2022_population, SUM(`2020 Population`) AS 2020_population, `Growth Rate`
50 FROM world_population
51 WHERE `2022 Population` < `2020 Population`
52 GROUP BY Continent, Country, `Area (km²)`, `Growth Rate`
53 ORDER BY 2022_population DESC LIMIT 10;
54
```

Result Grid | Filter Rows: | Export: | Wrap Cell Contents: | Fetch rows: |

Continent	Country	2022_population	2020_population	Growth Rate
Europe	Russia	144713314	145617329	0.9973
Asia	Japan	123951692	125244761	0.9947
Europe	Ukraine	39701739	43909666	0.912
Europe	Romania	19659267	19442038	1.0171
Europe	Greece	10384971	10512232	0.9942
Europe	Portugal	10270865	10298192	0.9981
Europe	Hungary	9967308	9750573	1.0265
Europe	Belarus	9534954	9633740	0.9955
Europe	Serbia	7221365	7358005	0.9897
Europe	Bulgaria	6781953	6979175	0.9849

Result Grid
Form Editor
Field Types
Query Stats

12. Largest decrease in population from 1970 to 2022:

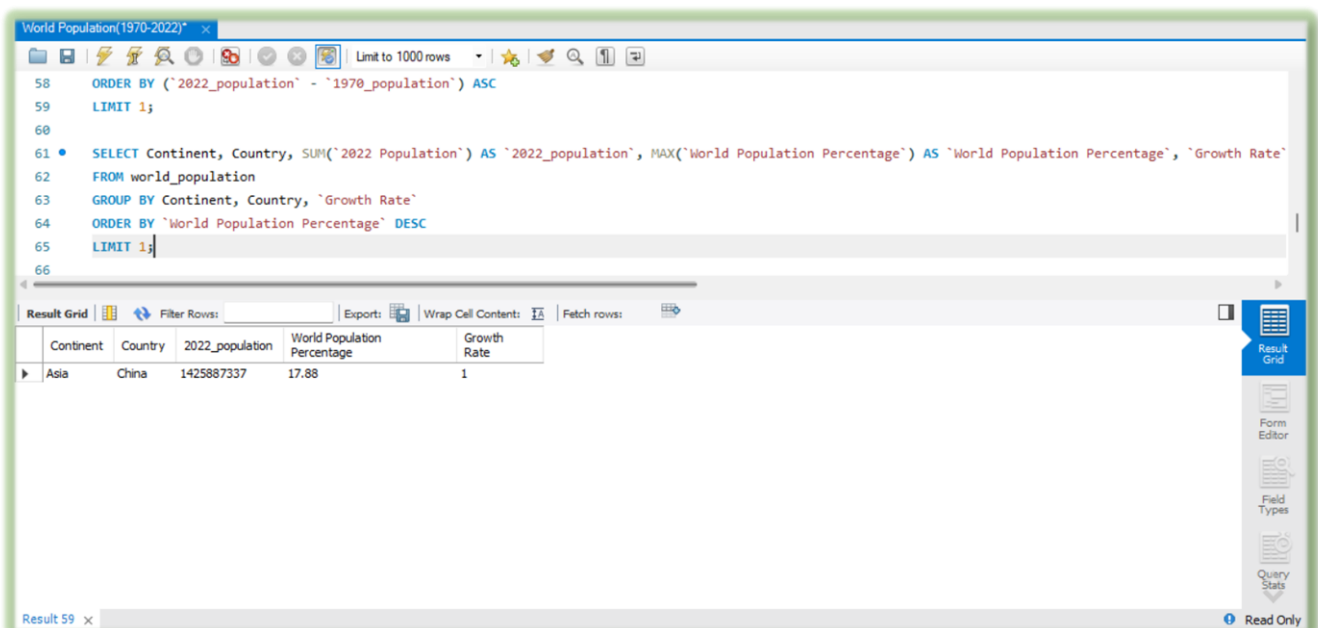


```
54
55 • SELECT Continent, Country, SUM('1970 Population') AS '1970_population', SUM('2022 Population') AS '2022_population', 'Growth Rate'
56 FROM world_population
57 GROUP BY Continent, Country, 'Growth Rate'
58 ORDER BY ('2022_population' - '1970_population') ASC
59 LIMIT 1;
60
61
62
```

Continent	Country	1970_population	2022_population	Growth Rate
Europe	Ukraine	47279086	39701739	0.912

Result 56 x Read Only

13. Highest population percentage of the world population in 2022:



```
58 ORDER BY ('2022_population' - '1970_population') ASC
59 LIMIT 1;
60
61 • SELECT Continent, Country, SUM('2022 Population') AS '2022_population', MAX('World Population Percentage') AS 'World Population Percentage', 'Growth Rate'
62 FROM world_population
63 GROUP BY Continent, Country, 'Growth Rate'
64 ORDER BY 'World Population Percentage' DESC
65 LIMIT 1;
66
```

Continent	Country	2022_population	World Population Percentage	Growth Rate
Asia	China	1425887337	17.88	1

Result 59 x Read Only

THANK YOU !!