

World Population Analysis

Pranay Bhakthula

Table of Contents:

S.no	Topic	Page Number
1	Introduction	3
2	Dataset Description	3
3	SQL Analysis	3
4	Tableau Analysis	20
4	Summary	26
5	Conclusion	27
6	References	27

Introduction:

The Aim of this analysis is to find interesting observations of population changes in the world over the last 4 decades (1980-2020). The countries with huge population like China, India, United States etc have a huge implication in the economy, production, environment and culture in the world and we must observe countries are not overpopulated and have a steady growth. Each country should analyze their countries population because it effects its economy and should make sure their health and food requirement. So, analyzing population is a very important in the functioning of the world.

Data Description:

The World Population dataset is taken from Kaggle. This dataset contains the world population data of all the countries in the world from the years 1970 – 2022. The dataset description is as follows.

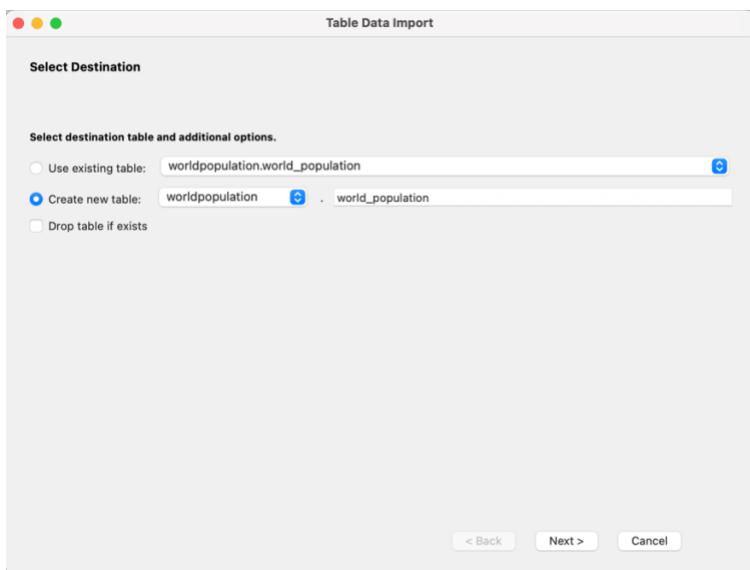
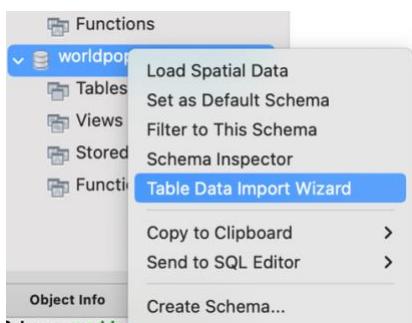
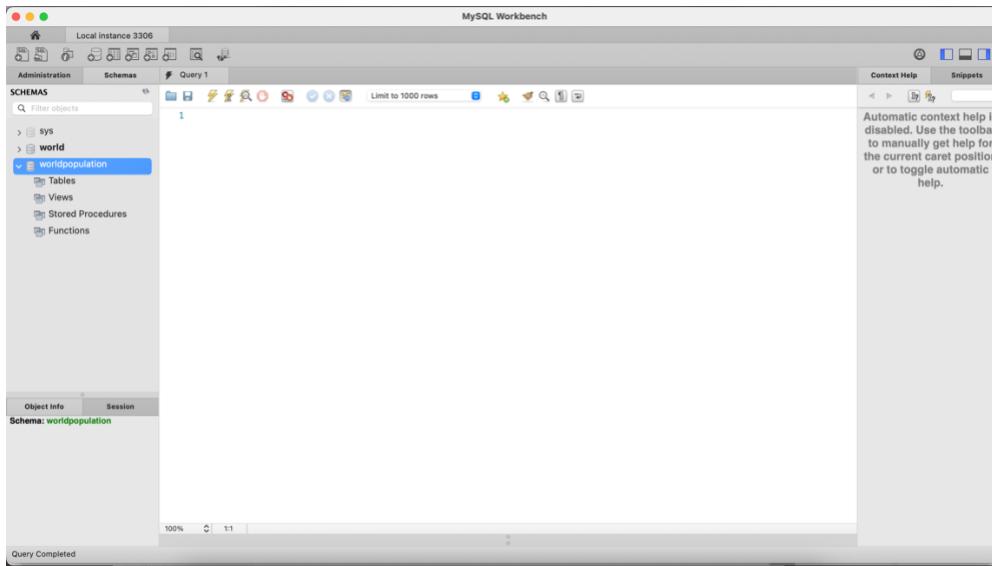
- **Rank:** Rank by Population.
- **CCA3:** 3 Digit Country/Territories Code.
- **Country/Territories:** Name of the Country/Territories.
- **Capital:** Name of the Capital.
- **Continent:** Name of the Continent.
- **2022 Population:** Population of the Country/Territories in the year 2022.
- **2020 Population:** Population of the Country/Territories in the year 2020.
- **2015 Population:** Population of the Country/Territories in the year 2015.
- **2010 Population:** Population of the Country/Territories in the year 2010.
- **2000 Population:** Population of the Country/Territories in the year 2000.
- **1990 Population:** Population of the Country/Territories in the year 1990.
- **1980 Population:** Population of the Country/Territories in the year 1980.
- **1970 Population:** Population of the Country/Territories in the year 1970.
- **Area (km²):** Area size of the Country/Territories in square kilometer.
- **Density (per km²):** Population Density per square kilometer.
- **Growth Rate:** Population Growth Rate by Country/Territories.
- **World Population Percentage:** The population percentage by each Country/Territories.

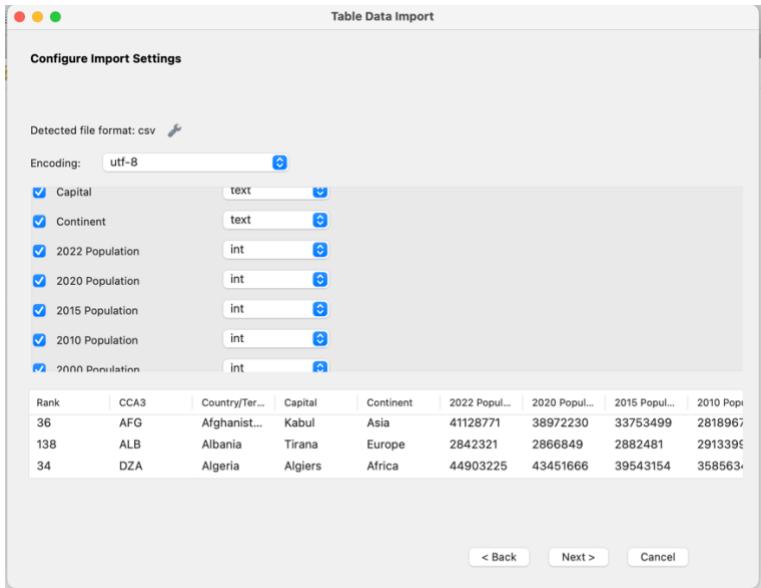
SQL Analysis:

When importing the data to workbench, there arises encoding error because of having special symbols like shown below. We open the .csv file in excel and change the data manually into English letters.

Antigua and Barbuda	Saint John,Ã¶s
Costa Rica	San JosÃ©

Below is process of importing data into MySQL Workbench.





Analysis with SQL:

Now we use SQL queries to perform various analysis on the world population data.

1. Show all the columns and rows in the table

1 • `SELECT * FROM worldpopulation.world_population;`

Rank	CCA3	Country/Territory	Capital	Continent	2022 Population	2020 Population	2015 Population	2010 Population	2000 Population	1990 Population	1980 Population	1970 Population	1960 Population	1950 Population	1940 Population	1930 Population	1920 Population	1910 Population						
36	AFG	Afghanistan	Kabul	Asia	41128771	38972230	33753499	28189672	19542982	10694796	12100000	10694796	12100000	10694796	12100000	10694796	12100000	10694796	12100000					
138	ALB	Albania	Tirana	Europe	2842321	2866849	2882481	2913399	3182021	3295066	2913399	3182021	3295066	2913399	3182021	3295066	2913399	3182021	3295066					
34	DZA	Algeria	Algiers	Africa	44903225	43451666	39543154	35856344	30774621	25518074	18	30774621	25518074	18	30774621	25518074	18	30774621	25518074	18				
213	ASM	American Samoa	Pago Pago	Oceania	44273	46189	51368	58489	58230	47818	32	47818	32	35	47818	32	35	47818	32	35				
203	AND	Andorra	Andorra la Vella	Europe	79824	77700	71746	71519	66097	53569	35	66097	53569	35	66097	53569	35	66097	53569	35				
42	AGO	Angola	Luanda	Africa	35588987	33428485	28127721	23364185	16394062	11828638	83	16394062	11828638	83	16394062	11828638	83	16394062	11828638	83				
224	AIA	Anguilla	The Valley	North America	15857	15585	14525	13172	11047	8316	65	11047	8316	65	11047	8316	65	11047	8316	65				
201	ATG	Antigua and Barbuda	Saint John's	North America	93763	92664	89941	85695	75055	63328	64	89941	85695	75055	63328	64	63328	64	63328	64	63328			
33	ARG	Argentina	Buenos Aires	South America	45510318	45036032	43257065	41100123	37070774	32637657	28	37070774	32637657	28	37070774	32637657	28	37070774	32637657	28				
140	ARM	Armenia	Yerevan	Asia	2780469	2805608	2878595	2946293	3168523	3556539	31	2946293	3168523	3556539	31	3168523	3556539	31	3168523	3556539	31			
198	ABW	Aruba	Oranjestad	North America	106445	106585	104257	100341	89101	65712	62	89101	65712	62	89101	65712	62	89101	65712	62				
55	AUS	Australia	Canberra	Oceania	26177413	25670051	23820236	22019168	19017963	17048003	14	19017963	17048003	14	19017963	17048003	14	19017963	17048003	14				
99	AUT	Austria	Vienna	Europe	8939617	8907777	8642421	8362829	8010428	7678729	75	8907777	8642421	8362829	8010428	7678729	75	8642421	8362829	75				
91	AZE	Azerbaijan	Baku	Asia	10358074	10284951	9863480	9237202	8190337	7427836	63	9863480	9237202	8190337	7427836	63	8190337	7427836	63	8190337	7427836	63		
176	BHS	Bahamas	Nassau	North America	409984	406471	392697	373272	325014	270679	22	392697	373272	325014	270679	22	325014	270679	22	325014	270679	22		
154	BHR	Bahrain	Manama	Asia	1472233	1477469	1362142	1213645	711442	517418	36	1213645	711442	517418	36	517418	36	36	517418	36	36			
8	BGD	Bangladesh	Dhaka	Asia	171186372	167420951	157830000	148391139	129193327	107147651	83	148391139	129193327	107147651	83	107147651	83	83	107147651	83	83			
186	BRB	Barbados	Bridgetown	North America	281635	280693	278083	274711	264657	258868	25	274711	264657	258868	25	258868	25	25	258868	25	25			
96	BLR	Belarus	Minsk	Europe	9534954	9633740	9700609	9731427	10256483	10428525	98	9700609	9731427	10256483	10428525	98	10256483	10428525	98	10256483	10428525	98		
81	BEL	Belgium	Brussels	Europe	11655930	11561717	11248303	10877947	10264343	9959560	98	11561717	11248303	10877947	10264343	9959560	98	10264343	9959560	98	10264343	9959560	98	
177	BLZ	Belize	Belmopan	North America	405272	394921	359871	322106	240406	182589	14	394921	359871	322106	240406	182589	14	322106	240406	182589	322106	240406	182589	
77	BEN	Benin	Porto-Novo	Africa	13352864	12643123	10932783	9445710	6998023	5133419	38	12643123	10932783	9445710	6998023	5133419	38	9445710	6998023	5133419	6998023	5133419	38	
209	BMU	Bermuda	Hamilton	North America	64184	64031	63144	63447	61371	57470	53	64031	63144	63447	61371	57470	53	63447	61371	57470	63447	61371	57470	
165	BTN	Bhutan	Thimphu	Asia	782455	772506	743274	705516	587207	558442	41	772506	743274	705516	587207	558442	41	705516	587207	558442	41	587207	558442	41
80	BOL	Bolivia	Sucre	South America	12224110	11936162	11090085	10223270	8592656	7096194	57	11936162	11090085	10223270	8592656	7096194	57	8592656	7096194	57	7096194	57	57	
137	BIH	Bosnia and Herzegovina	Šarajevo	Europe	3233526	3318407	3524324	3811088	4179350	4494310	41	3318407	3524324	3811088	4179350	4494310	41	4179350	4494310	41	4494310	41	41	

Current World population

```
3      # Current World population
4 •  SELECT FORMAT((SUM(`2022 Population`)),0) AS `total world population`
5      FROM worldpopulation.world_population;
6
```

100% ◊ 1:5 |

Result Grid Filter Rows: Search Export:

total world population

| ► 7,973,413,042 |

World population in 1980

```
7      # World population in 1980
8 •  SELECT FORMAT((SUM(`1980 Population`)),0) AS `total world population`
9      FROM worldpopulation.world_population;
```

100% ◊ 39:9 |

Result Grid Filter Rows: Search Export:

total world population

| ► 4,442,400,371 |

total population change from 1980 to 2022

```
11     # total population change from 1980 to 2022
12 •  SELECT FORMAT(SUM(`2022 Population`)-SUM(`1980 Population`),0) AS `total world population`
13      FROM worldpopulation.world_population;
```

100% ◊ 1:14 |

Result Grid Filter Rows: Search Export:

total world population

| ► 3,531,012,671 |

2. Show all the distinct continents in the table

```
3 •  SELECT DISTINCT Continent FROM worldpopulation.world_population;
```

100% ◊ 65:3 |

Result Grid Filter Rows: Search Export:

Continent

| ► Asia |
| Europe |
| Africa |
| Oceania |
| North America |
| South America |

3. Show all the distinct countries in the table

```
4  
5 • SELECT DISTINCT `Country/Territory` FROM worldpopulation.world_population ORDER BY `Country/Territory` ASC;
```

100% 38:3

Result Grid Filter Rows: Search Export:

Country/Territory
Afghanistan
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antigua and Barbuda
Argentina
Armenia
Aruba
Australia
Austria

4. Display number of countries in the world

```
6  
7 • SELECT COUNT(DISTINCT `Country/Territory`) AS Country_Count FROM worldpopulation.world_population;
```

100% 99:7

Result Grid Filter Rows: Search Export:

Country_Count
234

5. Display top 10 ranked countries in the world

```
10      # Display top 10 ranked countries in the world
11 •  SELECT `Rank`, `Country/Territory` AS Country, `2022 Population`
12      FROM worldpopulation.world_population
13      WHERE `Rank` BETWEEN 1 AND 10
14      ORDER BY `RANK` ASC;
15
16
```

100% 25:10

Result Grid Filter Rows: Search Export:

Rank	Country/Territory	Country
1	China	1425887337
2	India	1417173173
3	United States	338289857
4	Indonesia	275501339
5	Pakistan	235824862
6	Nigeria	218541212
7	Brazil	215313498
8	Bangladesh	171186372
9	Russia	144713314
10	Mexico	127504125

6. Display bottom 10 ranked countries in the world

```
16      # Display bottom 10 ranked countries in the world
17 •  SELECT `Rank`, `Country/Territory` AS Country, `2022 Population`
18  FROM worldpopulation.world_population
19  ORDER BY `RANK` DESC
20  LIMIT 10;
21
```

100% 10:20

Result Grid Filter Rows: Search Export: Fetch rows:

	Rank	Country	2022 Population
▶	234	Vatican City	510
◀	233	Tokelau	1871
◀	232	Niue	1934
◀	231	Falkland Islands	3780
◀	230	Montserrat	4390
◀	229	Saint Pierre and Miquelon	5862
◀	228	Saint Barthelemy	10967
◀	227	Tuvalu	11312
◀	226	Wallis and Futuna	11572
◀	225	Nauru	12668

7. Display 20 highest populated countries in the world

```
22      # Display 20 highest populated countries in the world
23 •  SELECT `Rank`, `Country/Territory` AS Country, `2022 Population`
24  FROM worldpopulation.world_population
25  ORDER BY `2022 Population` DESC
26  LIMIT 20;
27
```

100% 32:25

Result Grid Filter Rows: Search Export: Fetch rows:

	Rank	Country	2022 Population
▶	1	China	1425887337
◀	2	India	1417173173
◀	3	United States	338289857
◀	4	Indonesia	275501339
◀	5	Pakistan	235824862
◀	6	Nigeria	218541212
◀	7	Brazil	215313498
◀	8	Bangladesh	171186372
◀	9	Russia	144713314
◀	10	Mexico	127504125
◀	11	Japan	123951692
◀	12	Ethiopia	123379924
◀	13	Philippines	115559009
◀	14	Egypt	110990103
◀	15	DR Congo	99010212
◀	16	Vietnam	98186856
◀	17	Iran	88550570
◀	18	Turkey	85341241
◀	19	Germany	83369843
◀	20	Thailand	71697030

8. Display 20 least populated countries in the world

```
28      # Display 20 least populated countries in the world
29 •   SELECT `Rank`,`Country/Territory` AS Country,`2022 Population`
30     FROM worldpopulation.world_population
31     ORDER BY `2022 Population` ASC
32     LIMIT 20;
33
```

100% ◇ | 31:31 |

Result Grid Filter Rows: Search Export: Fetch rows:

Rank	Country	2022 Population
234	Vatican City	510
233	Tokelau	1871
232	Niue	1934
231	Falkland Islands	3780
230	Montserrat	4390
229	Saint Pierre and Miquelon	5862
228	Saint Barthélemy	10967
227	Tuvalu	11312
226	Wallis and Futuna	11572
225	Nauru	12668
224	Anguilla	15857
223	Cook Islands	17011
222	Palau	18055
221	British Virgin Islands	31305
220	Saint Martin	31791
219	Gibraltar	32649
218	San Marino	33660
217	Monaco	36469
216	Liechtenstein	39327
215	Marshall Islands	41569

9. Display top 20 countries with largest area/size in the world

```
34      # Display top 20 countries with largest area/size in the world
35 •   SELECT ROW_NUMBER() OVER () AS `row_number`, `Country/Territory` AS Country,
36           format(`Area (kmsq)`,0) AS `Area km^2`
37     FROM worldpopulation.world_population
38     ORDER BY `Area (kmsq)` DESC
39     LIMIT 20;
40
41
```

100% ◇ | 10:39 |

Result Grid Filter Rows: Search Export: Fetch rows:

row_number	Country	Area km ²
1	Russia	17,098,242
2	Canada	9,984,670
3	China	9,706,961
4	United States	9,372,610
5	Brazil	8,515,767
6	Australia	7,692,024
7	India	3,287,590
8	Argentina	2,780,400
9	Kazakhstan	2,724,900
10	Algeria	2,381,741
11	DR Congo	2,344,858
12	Greenland	2,166,086
13	Saudi Arabia	2,149,690
14	Mexico	1,964,375
15	Indonesia	1,904,569
16	Sudan	1,886,068
17	Libya	1,759,540
18	Iran	1,648,195
19	Mongolia	1,564,110
20	Peru	1,285,216

10. Display 20 countries with smallest area/size in the world

```
41      # Display 20 countries with smallest area/size in the world
42 •  SELECT ROW_NUMBER() OVER () AS `row_number`, `Country/Territory` AS Country,
43        format(`Area (kmsq)`,0) AS `Area km^2`
44  FROM worldpopulation.world_population
45  ORDER BY `Area (kmsq)` ASC
46  LIMIT 20;
```

100% ◇ 27:45 |

Result Grid Filter Rows: Search Export:

	row_number	Country	Area km ²
▶	1	Vatican City	1
	2	Monaco	2
	3	Gibraltar	6
	4	Tokelau	12
	5	Nauru	21
	6	Saint Barthelemy	21
	7	Tuvalu	26
	8	Macau	30
	9	Sint Maarten	34
	10	Saint Martin	53
	11	Bermuda	54
	12	San Marino	61
	13	Guernsey	78
	14	Anguilla	91
	15	Montserrat	102
	16	Jersey	116
	17	Wallis and Futuna	142
	18	British Virgin Isla...	151
	19	Liechtenstein	160
	20	Aruba	180

11. Display 20 highly densely populated countries in the world

```
48
49      # Display 20 highly densely populated countries in the world
50 •  SELECT ROW_NUMBER() OVER () AS `row_number`,
51        `Country/Territory` AS Country,
52        `Density (per kmsq)`
53  FROM worldpopulation.world_population
54  ORDER BY `Density (per kmsq)` DESC
55  LIMIT 20;
56
```

100% ◇ 35:54 |

Result Grid Filter Rows: Search Export:

	row_number	Country	Density (per kmsq)
▶	1	Macau	23172.2667
	2	Monaco	18234.5
	3	Singapore	8416.4634
	4	Hong Kong	6783.3922
	5	Gibraltar	5441.5
	6	Bahrain	1924.4876
	7	Maldives	1745.9567
	8	Malta	1687.6139
	9	Sint Maarten	1299.2647
	10	Bermuda	1188.5926
	11	Bangladesh	1160.035
	12	Jersey	954.9828
	13	Mayotte	871.9278
	14	Palestine	844.063
	15	Guernsey	811.5513
	16	Taiwan	660.1662
	17	Barbados	654.9651
	18	Mauritius	636.9946
	19	Nauru	603.2381
	20	Saint Martin	599.8302

12. Display 20 least densely populated countries in the world

```
55      # Display 20 least densely populated countries in the world
56  •  SELECT ROW_NUMBER() OVER () AS `row_number`,
57      `Country/Territory` AS Country,
58      `Density (per kmsq)` AS Density
59  FROM worldpopulation.world_population
60  ORDER BY `Density (per kmsq)` ASC
61  LIMIT 20;
62
63
```

100% ◇ | 46:55 |

Result Grid Filter Rows: Search Export:

	row_number	Country	Density (per kmsq)
▶	1	Greenland	0.0261
◀	2	Falkland Islands	0.3105
◀	3	Western Sahara	2.1654
◀	4	Mongolia	2.1727
◀	5	Namibia	3.1092
◀	6	Australia	3.4032
◀	7	Iceland	3.6204
◀	8	French Guiana	3.6459
◀	9	Guyana	3.7621
◀	10	Suriname	3.7727
◀	11	Canada	3.8513
◀	12	Libya	3.8717
◀	13	Botswana	4.5194
◀	14	Mauritania	4.5951
◀	15	Kazakhstan	7.1188
◀	16	Niue	7.4385
◀	17	Russia	8.4636
◀	18	Gabon	8.9252
◀	19	Central African R...	8.9555
◀	20	Bolivia	11.1272

13. Display top 20 countries with highest growth rate

```
65      # Display top 20 countries with highest growth rate
66  •  SELECT ROW_NUMBER() OVER () AS `row_number`,
67      `Country/Territory` AS Country,
68      `Growth Rate` AS Growth_Rate
69  FROM worldpopulation.world_population
70  ORDER BY `Growth Rate` DESC
71  LIMIT 20;
72
```

100% ◇ | 28:70 |

Result Grid Filter Rows: Search Export:

	row_number	Country	Growth Rate
▶	1	Moldova	1.0691
◀	2	Poland	1.0404
◀	3	Niger	1.0378
◀	4	Syria	1.0376
◀	5	Slovakia	1.0359
◀	6	DR Congo	1.0325
◀	7	Mayotte	1.0319
◀	8	Chad	1.0316
◀	9	Angola	1.0315
◀	10	Mali	1.0314
◀	11	Somalia	1.0312
◀	12	Uganda	1.0304
◀	13	Tanzania	1.03
◀	14	Zambia	1.028
◀	15	Mozambique	1.0278
◀	16	Benin	1.0274
◀	17	Burundi	1.027
◀	18	Sudan	1.0267
◀	19	Hungary	1.0265
◀	20	Cameroon	1.0263

14. Display top 20 countries with lowest growth rate

```

72
73      # Display top 20 countries with lowest growth rate
74 •   SELECT ROW_NUMBER() OVER () AS `row_number`,
75          `Country/Territory` AS Country,
76          `Growth Rate`
77      FROM worldpopulation.world_population
78      ORDER BY `Growth Rate` ASC
79      LIMIT 20;
80
81

```

100% ◇ 1:72 |

Result Grid Filter Rows: Search Export:

row_number	Country	Growth Rate
1	Ukraine	0.912
2	Lebanon	0.9816
3	American Samoa	0.9831
4	Bulgaria	0.9849
5	Lithuania	0.9869
6	Latvia	0.9876
7	Bosnia and Herz...	0.9886
8	Marshall Islands	0.9886
9	Serbia	0.9897
10	Croatia	0.9927
11	United States Vir...	0.9937
12	Montserrat	0.9939
13	Monaco	0.9941
14	Greece	0.9942
15	Japan	0.9947
16	Saint Martin	0.9951
17	Wallis and Futuna	0.9953
18	North Macedonia	0.9954
19	Belarus	0.9955
20	Albania	0.9957

15. Display top 20 countries with highest world population contribution.

```

89      # Display top 15 countries with highest world population contribution in
90      # context to individual population, area and growth rate
91 •   SELECT ROW_NUMBER() OVER () AS `row_number`,
92          `Country/Territory` AS Country,
93          format(`2022 Population`,0) AS Population,
94          format(`Area (kmsq)`,0) AS `Area km^2`,
95          `Growth Rate`,
96          `World Population Percentage`
97      FROM worldpopulation.world_population
98      ORDER BY `World Population Percentage` DESC
99      LIMIT 15;
100

```

100% ◇ 10:87 |

Result Grid Filter Rows: Search Export:

row_number	Country	Population	Area km^2	Growth Rate	World Population Percentage
1	China	1,425,887,337	9,706,961	1	17.88
2	India	1,417,173,173	3,287,590	1.0068	17.77
3	United States	338,289,857	9,372,610	1.0038	4.24
4	Indonesia	275,501,339	1,904,569	1.0064	3.45
5	Pakistan	235,824,862	881,912	1.0191	2.96
6	Nigeria	218,541,212	923,768	1.0241	2.74
7	Brazil	215,313,498	8,515,767	1.0046	2.7
8	Bangladesh	171,186,372	147,570	1.0108	2.15
9	Russia	144,713,314	17,098,242	0.9973	1.81
10	Mexico	127,504,125	1,964,375	1.0063	1.6
11	Ethiopia	123,379,924	1,104,300	1.0257	1.55
12	Japan	123,951,692	377,930	0.9947	1.55
13	Philippines	115,559,009	342,353	1.0147	1.45
14	Egypt	110,990,103	1,002,450	1.0158	1.39
15	DR Congo	99,010,212	2,344,858	1.0325	1.24

17. changes in Top 15 countries with highest population over each decade

```
# 17. changes in Top 15 countries with highest population over each decade
WITH pop_1980 AS(
    SELECT ROW_NUMBER() OVER () AS `row_number`,
        `Country/Territory` AS `1980's Country`,
        format(`1980 Population`,0) AS `1980's Population`
    FROM worldpopulation.world_population
    ORDER BY `1980 Population` DESC
    LIMIT 15
), pop_1990 AS(
    SELECT ROW_NUMBER() OVER () AS `row_number`,
        `Country/Territory` AS `1990's Country`,
        format(`1990 Population`,0) AS `1990's Population`
    FROM worldpopulation.world_population
    ORDER BY `1990 Population` DESC
    LIMIT 15
), pop_2000 AS(
    SELECT ROW_NUMBER() OVER () AS `row_number`,
        `Country/Territory` AS `2000's Country`,
        format(`2000 Population`,0) AS `2000's Population`
    FROM worldpopulation.world_population
    ORDER BY `2000 Population` DESC
    LIMIT 15
), pop_2010 AS(
    SELECT ROW_NUMBER() OVER () AS `row_number`,
        `Country/Territory` AS `2010's Country`,
        format(`2010 Population`,0) AS `2010's Population`
    FROM worldpopulation.world_population
    ORDER BY `2010 Population` DESC
    LIMIT 15
), pop_2020 AS(
    SELECT ROW_NUMBER() OVER () AS `row_number`,
        `Country/Territory` AS `2020's Country`,
        format(`2020 Population`,0) AS `2020's Population`
    FROM worldpopulation.world_population
    ORDER BY `2020 Population` DESC
    LIMIT 15
),
SELECT * FROM pop_1980
INNER JOIN pop_1990 USING(`row_number`)
INNER JOIN pop_2000 USING(`row_number`)
INNER JOIN pop_2010 USING(`row_number`)
INNER JOIN pop_2020 USING(`row_number`)
ORDER BY `row_number`;
```

Result Grid	Filter Rows:	Q Search	Export:							
row_number	1980's Country	1980's Population	1990's Country	1990's Population	2000's Country	2000's Population	2010's Country	2010's Population	2020's Country	2020's Population
1	China	982,372,466	China	1,153,704,252	China	1,264,099,069	China	1,348,191,368	China	1,424,929,781
2	India	696,828,385	India	870,452,165	India	1,059,633,675	India	1,240,613,620	India	1,396,387,127
3	United States	223,140,018	United States	246,083,732	United States	282,398,554	United States	311,182,845	United States	335,942,003
4	Indonesia	148,177,096	Indonesia	182,159,874	Indonesia	214,072,421	Indonesia	244,016,173	Indonesia	271,857,970
5	Russia	138,257,420	Brazil	150,706,446	Brazil	175,873,720	Brazil	196,353,492	Pakistan	227,196,741
6	Brazil	122,288,383	Russia	148,005,704	Pakistan	154,369,924	Pakistan	194,454,498	Brazil	213,196,304
7	Japan	117,624,196	Japan	123,686,321	Russia	146,844,839	Nigeria	160,952,853	Nigeria	208,327,405
8	Bangladesh	83,929,765	Pakistan	115,414,069	Bangladesh	129,193,327	Bangladesh	148,391,139	Bangladesh	167,420,951
9	Pakistan	80,624,057	Bangladesh	107,147,651	Japan	126,803,861	Russia	143,242,599	Russia	145,617,329
10	Germany	77,786,703	Nigeria	95,214,257	Nigeria	122,851,984	Japan	128,105,431	Mexico	125,998,302
11	Nigeria	72,951,439	Mexico	81,720,428	Mexico	97,873,442	Mexico	112,532,401	Japan	125,244,761
12	Mexico	67,705,186	Germany	79,370,196	Germany	81,551,677	Philippines	94,636,700	Ethiopia	117,190,911
13	Italy	56,329,482	Vietnam	66,912,613	Vietnam	79,001,142	Ethiopia	89,237,791	Philippines	112,190,977
14	United Kingdom	56,326,328	Philippines	61,558,898	Philippines	77,958,223	Vietnam	87,411,012	Egypt	107,465,134
15	France	53,713,830	Egypt	57,214,630	Egypt	71,371,371	Egypt	87,252,413	Vietnam	96,648,685

18. Top 5 populated countries for each continent

```
147      # Top 5 populated countries for each continent
148
149 •  SELECT s.Continent,
150      s.Country,
151      format(s.Population,0) AS Population
152  ⏺ FROM (
153      SELECT Continent, `Country/Territory` AS `Country`, `2022 Population` AS Population,
154          ROW_NUMBER() OVER (PARTITION BY Continent ORDER BY `2022 Population` DESC) AS row_num
155      FROM worldpopulation.world_population
156  ) AS s
157  WHERE row_num <= 5;
```

Continent	Country	Population
► Africa	Nigeria	218,541,212
Africa	Ethiopia	123,379,924
Africa	Egypt	110,990,103
Africa	DR Congo	99,010,212
Africa	Tanzania	65,497,748
Asia	China	1,425,887,337
Asia	India	1,417,173,173
Asia	Indonesia	275,501,339
Asia	Pakistan	235,824,862
Asia	Bangladesh	171,186,372
Europe	Russia	144,713,314
Europe	Germany	83,369,843
Europe	United Kingdom	67,508,936
Europe	France	64,626,628
Europe	Italy	59,037,474
North America	United States	338,289,857
North America	Mexico	127,504,125
North America	Canada	38,454,327
North America	Guatemala	17,843,908
North America	Haiti	11,584,996
Oceania	Australia	26,177,413
Oceania	Papua New Guinea	10,142,619
Oceania	New Zealand	5,185,288
Oceania	Fiji	929,766
Oceania	Solomon Islands	724,273
South America	Brazil	215,313,498
South America	Colombia	51,874,024
South America	Argentina	45,510,318
South America	Peru	34,049,588
South America	Venezuela	28,301,696

19. Top 5 least populated countries for each continent

```
159      # Top 5 least populated countries for each continent
160
161 •  SELECT s.Continent,
162     s.Country,
163     format(s.Population,0) AS Population
164  FROM (
165      SELECT Continent, `Country/Territory` AS `Country`, `2022 Population` AS Population,
166          ROW_NUMBER() OVER (PARTITION BY Continent ORDER BY `2022 Population` ASC) AS row_num
167      FROM worldpopulation.world_population
168  ) AS s
169  WHERE row_num <= 5;
170
```

Continent	Country	Population
Africa	Seychelles	107,118
Africa	Sao Tome and Pr...	227,380
Africa	Mayotte	326,101
Africa	Western Sahara	575,986
Africa	Cape Verde	593,149
Asia	Brunei	449,002
Asia	Maldives	523,787
Asia	Macau	695,168
Asia	Bhutan	782,455
Asia	Timor-Leste	1,341,296
Europe	Vatican City	510
Europe	Gibraltar	32,649
Europe	San Marino	33,660
Europe	Monaco	36,469
Europe	Liechtenstein	39,327
North America	Montserrat	4,390
North America	Saint Pierre and...	5,862
North America	Saint Barthelemy	10,967
North America	Anguilla	15,857
North America	British Virgin Isla...	31,305
Oceania	Tokelau	1,871
Oceania	Niue	1,934
Oceania	Tuvalu	11,312
Oceania	Wallis and Futuna	11,572
Oceania	Nauru	12,668
South America	Falkland Islands	3,780
South America	French Guiana	304,557
South America	Suriname	618,040
South America	Guyana	808,726
South America	Uruguay	3,422,794

20. Countries that increased highest number of people in last 4 decades (1980-2020)

```

171      # 20. Countries that increased highest number of people in last 4 decades (1980-2020)
172 •  SELECT ROW_NUMBER() OVER () AS `row_number`,
173     `Country/Territory` AS `Country`,
174     format(`1980 Population`,0) AS `1980's Population`,
175     format(`2020 Population`,0) AS `2020's Population`,
176     format(`2020 Population`-'1980 Population`,0) AS `Population difference`,
177     ((`2020 Population`-'1980 Population`)/`1980 Population`)*100 AS `Growth%`
178   FROM worldpopulation.world_population
179   ORDER BY `2020 Population`-'1980 Population` DESC
180   LIMIT 15;

```

100% ◇ | 20:169 |

Result Grid						
	row_number	Country	1980's Population	2020's Population	Population difference	Growth%
▶	1	India	696,828,385	1,396,387,127	699,558,742	100.3918
	2	China	982,372,466	1,424,929,781	442,557,315	45.0498
	3	Pakistan	80,624,057	227,196,741	146,572,684	181.7977
	4	Nigeria	72,951,439	208,327,405	135,375,966	185.5700
	5	Indonesia	148,177,096	271,857,970	123,680,874	83.4683
	6	United States	223,140,018	335,942,003	112,801,985	50.5521
	7	Brazil	122,288,383	213,196,304	90,907,921	74.3390
	8	Bangladesh	83,929,765	167,420,951	83,491,186	99.4774
	9	Ethiopia	34,945,469	117,190,911	82,245,442	235.3537
	10	DR Congo	26,708,686	92,853,164	66,144,478	247.6516
	11	Philippines	48,419,546	112,190,977	63,771,431	131.7060
	12	Egypt	43,748,556	107,465,134	63,716,578	145.6427
	13	Mexico	67,705,186	125,998,302	58,293,116	86.0985
	14	Iran	38,520,664	87,290,193	48,769,529	126.6061
	15	Vietnam	52,968,270	96,648,685	43,680,415	82.4652

21. Countries that increased highest number of people in last decade (2010-2020)

```

182      # 21. Countries that increased highest number of people in last decade (2010-2020)
183 •  SELECT ROW_NUMBER() OVER () AS `row_number`,
184     `Country/Territory` AS `Country`,
185     format(`2010 Population`,0) AS `2010's Population`,
186     format(`2020 Population`,0) AS `2020's Population`,
187     format(`2020 Population`-'2010 Population`,0) AS `Population difference`,
188     ((`2020 Population`-'2010 Population`)/`2010 Population`)*100 AS `Growth%`
189   FROM worldpopulation.world_population
190   ORDER BY `2020 Population`-'2010 Population` DESC
191   LIMIT 15;
192

```

100% ◇ | 1:192 |

Result Grid						
	row_number	Country	2010's Population	2020's Population	Population difference	Growth%
▶	1	India	1,240,613,620	1,396,387,127	155,773,507	12.5562
	2	China	1,348,191,368	1,424,929,781	76,738,413	5.6920
	3	Nigeria	160,952,853	208,327,405	47,374,552	29.4338
	4	Pakistan	194,454,498	227,196,741	32,742,243	16.8380
	5	Ethiopia	89,237,791	117,190,911	27,953,120	31.3243
	6	Indonesia	244,016,173	271,857,970	27,841,797	11.4098
	7	DR Congo	66,391,257	92,853,164	26,461,907	39.8575
	8	United States	311,182,845	335,942,003	24,759,158	7.9565
	9	Egypt	87,252,413	107,465,134	20,212,721	23.1658
	10	Bangladesh	148,391,139	167,420,951	19,029,812	12.8241
	11	Philippines	94,636,700	112,190,977	17,554,277	18.5491
	12	Brazil	196,353,492	213,196,304	16,842,812	8.5778
	13	Tanzania	45,110,527	61,704,518	16,593,991	36.7852
	14	Mexico	112,532,401	125,998,302	13,465,901	11.9662
	15	Uganda	32,341,728	44,404,611	12,062,883	37.2982

22. Countries that increased lowest number of people in last 4 decades (1980-2020)

```
# 22. Countries that increased lowest number of people in last 4 decades (1980-2020)
SELECT ROW_NUMBER() OVER () AS `row_number`,
`Country/Territory` AS `Country`,
format(`1980 Population`,0) AS `1980's Population`,
format(`2020 Population`,0) AS `2020's Population`,
format(`2020 Population`-'1980 Population`,0) AS `Population difference`,
(`2020 Population`-'1980 Population`)/`1980 Population`*100 AS `Growth%`
FROM worldpopulation.world_population
ORDER BY `2020 Population`-'1980 Population` ASC
LIMIT 15;
```

Result Grid

row_number	Country	1980's Population	2020's Population	Population difference	Growth%
1	Ukraine	49,973,920	43,909,666	-6,064,254	-12.1348
2	Romania	22,125,224	19,442,038	-2,683,186	-12.1273
3	Bulgaria	8,980,606	6,979,175	-2,001,431	-22.2861
4	Georgia	5,145,843	3,765,912	-1,379,931	-26.8164
5	Moldova	4,103,240	3,084,847	-1,018,393	-24.8192
6	Hungary	10,698,679	9,750,573	-948,106	-8.8619
7	Bosnia and Herz...	4,199,820	3,318,407	-881,413	-20.9869
8	Lithuania	3,521,206	2,820,267	-700,939	-19.9062
9	Latvia	2,572,037	1,897,052	-674,985	-26.2432
10	Croatia	4,680,144	4,096,868	-583,276	-12.4628
11	Serbia	7,777,010	7,358,005	-419,005	-5.3877
12	Armenia	3,135,123	2,805,608	-329,515	-10.5104
13	Belarus	9,817,257	9,633,740	-183,517	-1.8693
14	Estonia	1,476,983	1,329,444	-147,539	-9.9892
15	Albania	2,941,651	2,866,849	-74,802	-2.5429

23. Countries that increased lowest number of people in last decade (2010-2020)

```
# 23. Countries that increased lowest number of people in last decade (2010-2020)
SELECT ROW_NUMBER() OVER () AS `row_number`,
`Country/Territory` AS `Country`,
format(`2010 Population`,0) AS `2010's Population`,
format(`2020 Population`,0) AS `2020's Population`,
format(`2020 Population`-'2010 Population`,0) AS `Population difference`,
(`2020 Population`-'2010 Population`)/`2010 Population`*100 AS `Growth%`
FROM worldpopulation.world_population
ORDER BY `2020 Population`-'2010 Population` ASC
LIMIT 15;
```

Result Grid

row_number	Country	2010's Population	2020's Population	Population difference	Growth%
1	Japan	128,105,431	125,244,761	-2,860,670	-2.2331
2	Ukraine	45,683,020	43,909,666	-1,773,354	-3.8819
3	Syria	22,337,563	20,772,595	-1,564,968	-7.0060
4	Romania	20,335,211	19,442,038	-893,173	-4.3922
5	Bulgaria	7,592,273	6,979,175	-613,098	-8.0753
6	Moldova	3,678,186	3,084,847	-593,339	-16.1313
7	Greece	11,033,783	10,512,232	-521,551	-4.7269
8	Bosnia and Herz...	3,811,088	3,318,407	-492,681	-12.9276
9	Puerto Rico	3,717,922	3,271,564	-446,358	-12.0056
10	Italy	59,822,450	59,500,579	-321,871	-0.5380
11	Lithuania	3,139,019	2,820,267	-318,752	-10.1545
12	Serbia	7,653,748	7,358,005	-295,743	-3.8640
13	Portugal	10,588,401	10,298,192	-290,209	-2.7408
14	Croatia	4,368,682	4,096,868	-271,814	-6.2219
15	Hungary	9,986,825	9,750,573	-236,252	-2.3656

24. Current Total population per each continent

```
227      # 24. Current Total population per each continent
228 •   SELECT
229      Continent,
230          FORMAT(SUM(`2022 Population`),0) AS `Population`
231      FROM worldpopulation.world_population
232      GROUP BY Continent
233      ORDER BY SUM(`2022 Population`) DESC;
234
```

100% ◇ 38:231 |

Result Grid Filter Rows: Search Export:

Continent	Population
► Asia	4,721,383,274
Africa	1,426,730,932
Europe	743,147,538
North America	600,296,136
South America	436,816,608
Oceania	45,038,554

25. Total population per each continent in 1980

```
235      # 25. Total population per each continent in 1980
236 •   SELECT
237      Continent,
238          FORMAT(SUM(`1980 Population`),0) AS `Population`
239      FROM worldpopulation.world_population
240      GROUP BY Continent
241      ORDER BY SUM(`1980 Population`) DESC;
242
```

100% ◇ 7:236 |

Result Grid Filter Rows: Search Export:

Continent	Population
► Asia	2,635,334,228
Europe	692,527,159
Africa	481,536,377
North America	368,293,361
South America	241,789,006
Oceania	22,920,240

26. Countries that highest growth percent in last 4 decades (1980-2020)

```

243      # 26. Countries that highest growth percent in last 4 decades (1980-2020)
244 •  SELECT ROW_NUMBER() OVER () AS `row_number`,
245       `Country/Territory` AS `Country`,
246       format(`1980 Population`,0) AS `1980's Population`,
247       format(`2020 Population`,0) AS `2020's Population`,
248       format(`2020 Population` - `1980 Population`,0) AS `Population difference`,
249       ((`2020 Population` - `1980 Population`)/`1980 Population`)*100 AS `Growth%`
250   FROM worldpopulation.world_population
251   ORDER BY ((`2020 Population` - `1980 Population`)/`1980 Population`)*100 DESC
252   LIMIT 15;
253

```

100% ◇ | 10:252

Result Grid						
	row_number	Country	1980's Population	2020's Population	Population difference	Growth%
►	1	Qatar	277,450	2,760,385	2,482,935	894.9126
	2	United Arab Emir...	1,014,048	9,287,289	8,273,241	815.8629
	3	Mayotte	52,233	305,587	253,354	485.0459
	4	Turks and Caico...	7,598	44,276	36,678	482.7323
	5	Equatorial Guinea	282,509	1,596,049	1,313,540	464.9551
	6	Jordan	2,216,903	10,928,721	8,711,818	392.9724
	7	Western Sahara	116,775	556,048	439,273	376.1704
	8	Oman	1,017,462	4,543,399	3,525,937	346.5424
	9	French Guiana	66,825	290,969	224,144	335.4194
	10	Saint Martin	7,776	32,552	24,776	318.6214
	11	Bahrain	362,595	1,477,469	1,114,874	307.4709
	12	Angola	8,330,047	33,428,485	25,098,438	301.3001
	13	Niger	6,173,177	24,333,639	18,160,462	294.1834
	14	Cayman Islands	17,100	67,311	50,211	293.6316
	15	Chad	4,408,230	16,644,701	12,236,471	277.5824

27. Countries that highest growth percent in last decade (2010-2020)

```

254      # 27. Countries that highest growth percent in last decade (2010-2020)
255 •  SELECT ROW_NUMBER() OVER () AS `row_number`,
256       `Country/Territory` AS `Country`,
257       format(`2010 Population`,0) AS `2010's Population`,
258       format(`2020 Population`,0) AS `2020's Population`,
259       format(`2020 Population` - `2010 Population`,0) AS `Population difference`,
260       ((`2020 Population` - `2010 Population`)/`2010 Population`)*100 AS `Growth%`
261   FROM worldpopulation.world_population
262   ORDER BY ((`2020 Population` - `2010 Population`)/`2010 Population`)*100 DESC
263   LIMIT 15;
264

```

100% ◇ | 10:263

Result Grid						
	row_number	Country	2010's Population	2020's Population	Population difference	Growth%
►	1	Qatar	1,713,504	2,760,385	1,046,881	61.0959
	2	Jordan	6,931,258	10,928,721	3,997,463	57.6730
	3	Oman	2,881,914	4,543,399	1,661,485	57.6521
	4	Turks and Caico...	29,726	44,276	14,550	48.9470
	5	Kuwait	2,943,356	4,360,444	1,417,088	48.1453
	6	Niger	16,647,543	24,333,639	7,686,096	46.1696
	7	Equatorial Guinea	1,094,524	1,596,049	501,525	45.8213
	8	Mayotte	211,786	305,587	93,801	44.2905
	9	Angola	23,364,185	33,428,485	10,064,300	43.0758
	10	Maldives	361,575	514,438	152,863	42.2770
	11	Chad	11,894,727	16,644,701	4,749,974	39.9334
	12	DR Congo	66,391,257	92,853,164	26,461,907	39.8575
	13	Afghanistan	28,189,672	38,972,230	10,782,558	38.2500
	14	Somalia	12,026,649	16,537,016	4,510,367	37.5031
	15	Uganda	32,341,728	44,404,611	12,062,883	37.2982

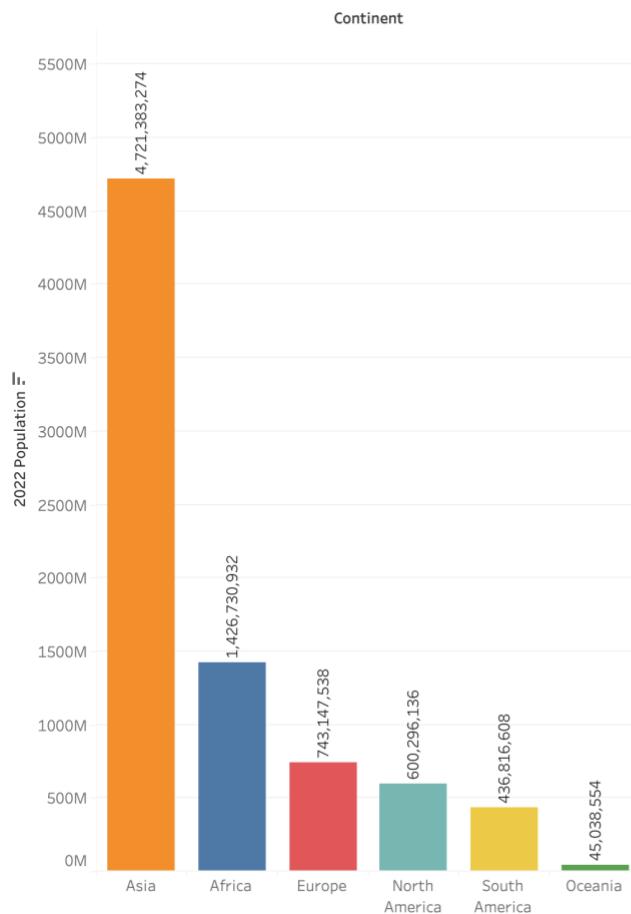
Tableau Analysis:

We have used Tableau which is a Powerful Visualization BI tool to make wonderful interactive tables, graphs, and dashboards to make in-depth analysis on the world population.

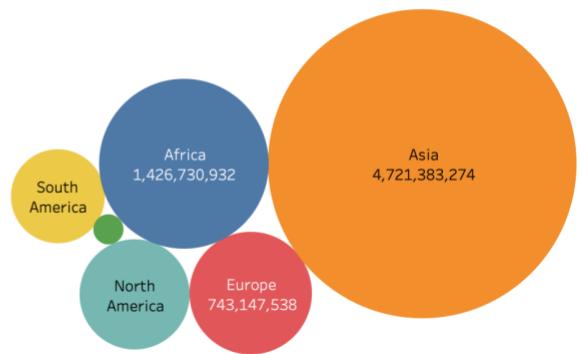
Please find the tableau file in the respective folder. In this analysis we use dashboards to view all the useful graphs together and make intelligent observations from it.

1. Population Continent wise

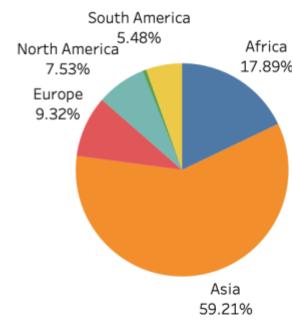
Continent Population (2022) Barchart



Continent Population (2022) Bubble chart



Continent Population (2022) Piechart

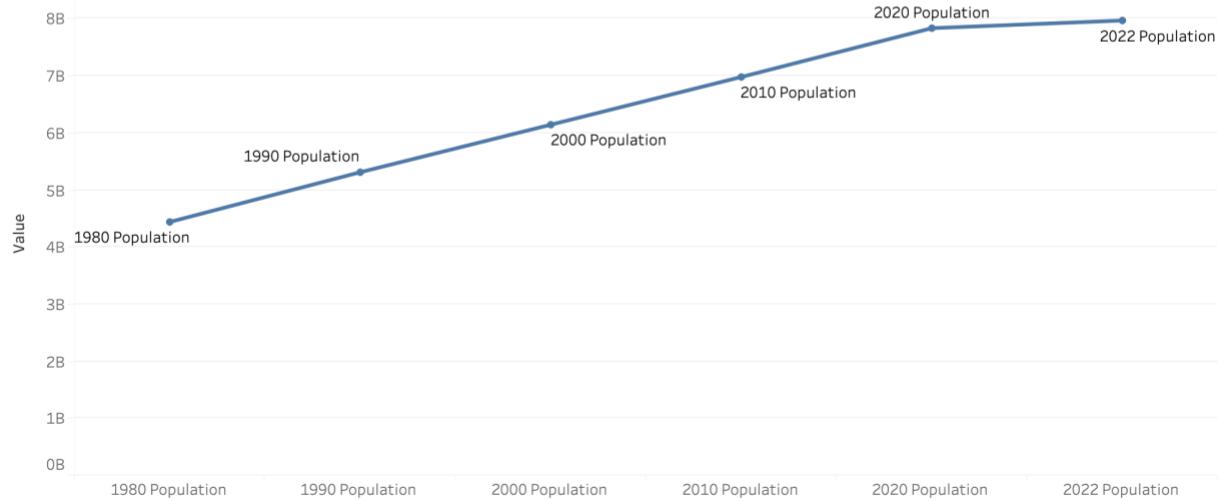


2. Population changes through decades 1980-2020.

Population Table

Continent	1980 Population	1990 Population	2000 Population	2010 Population	2020 Population	2022 Population
Africa	481,536,377	638,150,629	818,946,032	1,055,228,072	1,360,671,810	1,426,730,932
Asia	2,635,334,228	3,210,563,577	3,735,089,604	4,220,041,327	4,663,086,535	4,721,383,274
Europe	692,527,159	720,320,797	726,093,423	735,613,934	745,792,196	743,147,538
North America	368,293,361	421,266,425	486,069,584	542,720,651	594,236,593	600,296,136
Oceania	22,920,240	26,743,822	31,222,778	37,102,764	43,933,426	45,038,554
South America	241,789,006	297,146,415	349,634,282	393,078,250	431,530,043	436,816,608
Grand Total	4,442,400,371	5,314,191,665	6,147,055,703	6,983,784,998	7,839,250,603	7,973,413,042

Population change with years

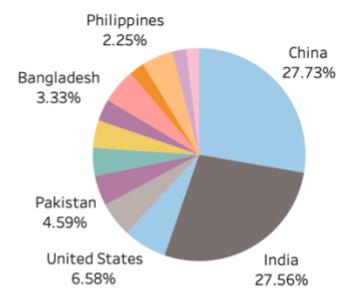


3. Top and bottom 15 countries with respect to population

Top 15 Populated Countries Population

Index	Country/Territory	
1	China	1,425,887,337
2	India	1,417,173,173
3	United States	338,289,857
4	Indonesia	275,501,339
5	Pakistan	235,824,862
6	Nigeria	218,541,212
7	Brazil	215,313,498
8	Bangladesh	171,186,372
9	Russia	144,713,314
10	Mexico	127,504,125
11	Japan	123,951,692
12	Ethiopia	123,379,924
13	Philippines	115,559,009
14	Egypt	110,990,103
15	DR Congo	99,010,212

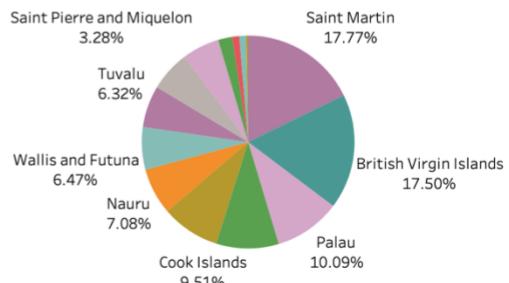
Top 15 countries population pie chart



Bottom 15 Populated Countries population

Index	Country/Territory	
1	Marshall Islands	41,569
2	Liechtenstein	39,327
3	Monaco	36,469
4	San Marino	33,660
5	Gibraltar	32,649
6	Saint Martin	31,791
7	British Virgin Islands	31,305
8	Palau	18,055
9	Cook Islands	17,011
10	Anguilla	15,857
11	Nauru	12,668
12	Wallis and Futuna	11,572
13	Tuvalu	11,312
14	Saint Barthelemy	10,967
15	Saint Pierre and Miquelon	5,862
16	Montserrat	4,390
17	Falkland Islands	3,780
18	Niue	1,934
19	Tokelau	1,871
20	Vatican City	510

Bottom 15 Populated Countries Pie population



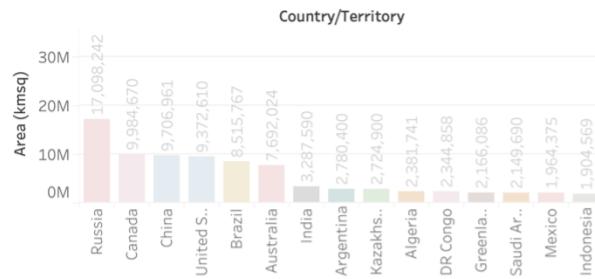
4. Population through years 1980 – 2020 to with respect to chosen column and observe top and bottom countries in various census years.

Population of countries through years

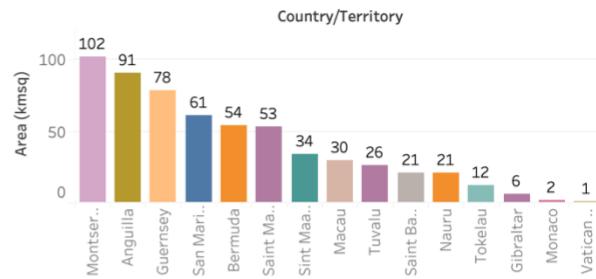
Index	Country/Territory	1980 Population	1990 Population	2000 Population	2010 Population	2020 Population
1	China	982,372,466	1,153,704,252	1,264,099,069	1,348,191,368	1,424,929,781
2	India	696,828,385	870,452,165	1,059,633,675	1,240,613,620	1,396,387,127
3	United States	223,140,018	248,083,732	282,398,554	311,182,845	335,942,003
4	Indonesia	148,177,096	182,159,874	214,072,421	244,016,173	271,857,970
5	Russia	138,257,420	148,005,704	146,844,839	143,242,599	145,617,329
6	Brazil	122,288,383	150,706,446	175,873,720	196,353,492	213,196,304
7	Japan	117,624,196	123,686,321	126,803,861	128,105,431	125,244,761
8	Bangladesh	83,929,765	107,147,651	129,193,327	148,391,139	167,420,951
9	Pakistan	80,624,057	115,414,069	154,369,924	194,454,498	227,196,741
10	Germany	77,786,703	79,370,196	81,551,677	81,325,090	83,328,988
11	Nigeria	72,951,439	95,214,257	122,851,984	160,952,853	208,327,405
12	Mexico	67,705,186	81,720,428	97,873,442	112,532,401	125,998,302
13	Italy	56,329,482	56,756,561	56,966,397	59,822,450	59,500,579
14	United Kingdom	56,326,328	57,210,442	58,850,043	62,760,039	67,059,474
15	France	53,713,830	56,412,897	58,665,453	62,444,567	64,480,053
16	Vietnam	52,968,270	66,912,613	79,001,142	87,411,012	96,648,685
17	Ukraine	49,973,920	51,589,817	48,879,755	45,683,020	43,909,666
18	Philippines	48,419,546	61,558,898	77,958,223	94,636,700	112,190,977
19	Thailand	45,737,753	55,228,410	63,066,603	68,270,489	71,475,664
20	Turkey	44,089,069	54,324,142	64,113,547	73,195,345	84,135,428
21	Egypt	43,748,556	57,214,630	71,371,371	87,252,413	107,465,134
22	Iran	38,520,664	55,793,629	65,544,383	75,373,855	87,290,193
23	South Korea	38,170,501	44,120,039	46,788,591	48,813,042	51,844,690
24	Spain	37,491,666	38,889,889	40,741,651	46,572,772	47,363,807
25	Poland	35,521,429	38,064,255	38,504,431	38,597,353	38,428,366
26	Ethiopia	34,945,469	47,878,073	67,031,867	89,237,791	117,190,911
27	Myanmar	33,465,781	40,099,553	45,538,332	49,390,988	53,423,198
28	South Africa	29,463,549	39,877,570	46,813,266	51,784,921	58,801,927
29	Argentina	28,024,803	32,637,657	37,070,774	41,100,123	45,036,032
30	DR Congo	26,708,686	35,987,541	48,616,317	66,391,257	92,853,164
31	Colombia	26,176,195	32,601,393	39,215,135	44,816,108	50,930,662
32	Canada	24,511,510	27,657,204	30,683,313	33,963,412	37,888,705
33	Romania	22,125,224	22,836,234	21,919,876	20,335,211	19,442,038
34	Morocco	19,678,444	24,570,814	28,554,415	32,464,865	36,688,772
35	Tanzania	19,297,659	26,206,012	34,463,704	45,110,527	61,704,518
36	Algeria	18,739,378	25,518,074	30,774,621	35,856,344	43,451,666

5. Top and bottom 15 countries with respect to Area, Growth rate and Population density

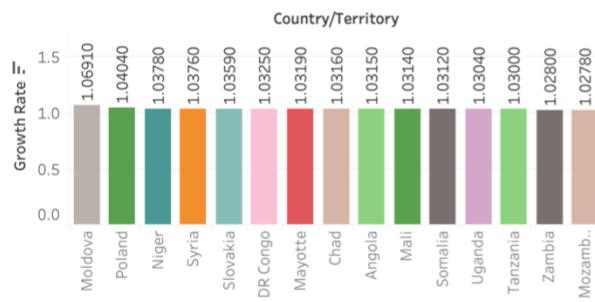
Top 15 Country Area



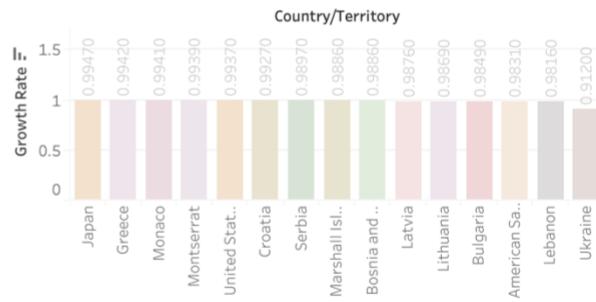
Bottom 15 Country Area



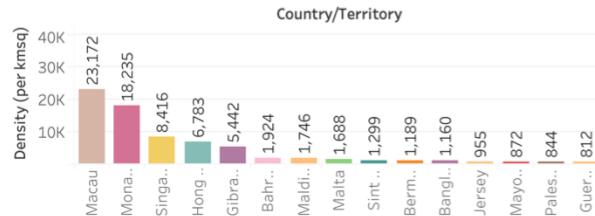
Top 15 Country Growth Rate



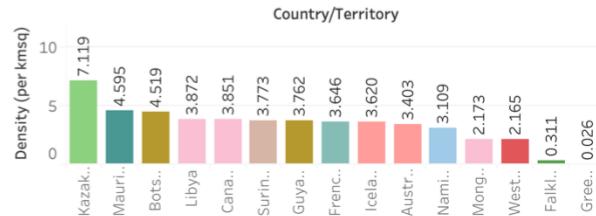
Bottom 15 Country Growth Rate



Top 15 Country Population Density



Bottom 15 Country Population Density



6. Top and bottom countries with respect to population with Top N and Bottom N user parameter.

Top 15 Populated Countries Population

Index	Country/Territory	Population
1	China	1,425,887,337
2	India	1,417,173,173
3	United States	338,289,857
4	Indonesia	275,501,339
5	Pakistan	235,824,862
6	Nigeria	218,541,212
7	Brazil	215,313,498
8	Bangladesh	171,186,372
9	Russia	144,713,314
10	Mexico	127,504,125
11	Japan	123,951,692
12	Ethiopia	123,379,924
13	Philippines	115,559,009
14	Egypt	110,990,103
15	DR Congo	99,010,212

Bottom 15 Populated Countries population

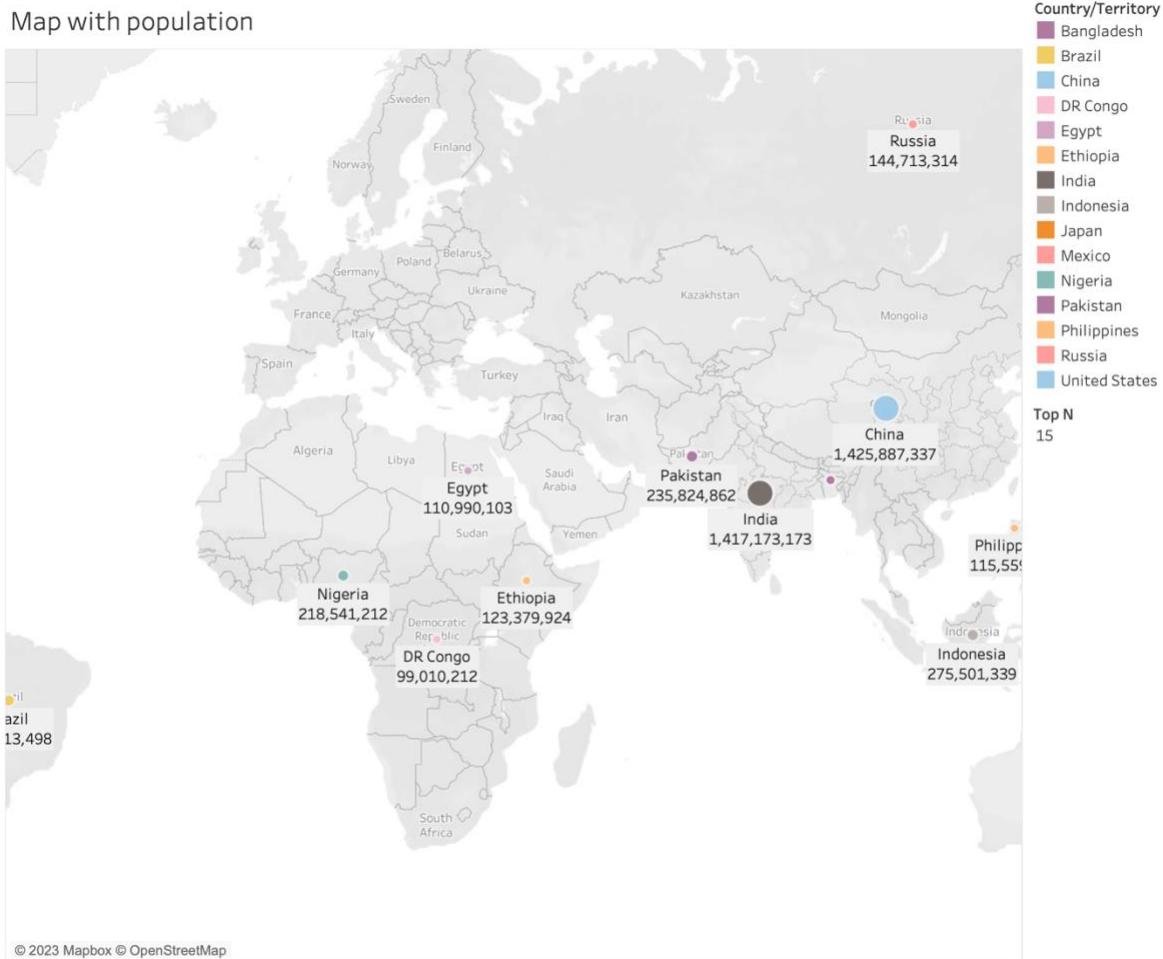
Index	Country/Territory	Population
1	Marshall Islands	41,569
2	Liechtenstein	39,327
3	Monaco	36,469
4	San Marino	33,660
5	Gibraltar	32,649
6	Saint Martin	31,791
7	British Virgin Islands	31,305
8	Palau	18,055
9	Cook Islands	17,011
10	Anguilla	15,857
11	Nauru	12,668
12	Wallis and Futuna	11,572
13	Tuvalu	11,312
14	Saint Barthlemy	10,967
15	Saint Pierre and Miquelon	5,862
16	Montserrat	4,390
17	Falkland Islands	3,780
18	Niue	1,934
19	Tokelau	1,871
20	Vatican City	510

Top N
15

Bottom N
20

7. Top counties map with Top N user parameter to view the top N populated countries entered in the parameter.

Map with population



Summary:

1. Over the last 4 decades (1980 - 2020), the top 4 countries remained the same (China, India, United States, Indonesia) but have increased their population by large amount where India doubled its population.
2. Vatican City is the least populated country with population of only 510.
3. China and India contribute to nearly 36% (~18% each) of the world population.
4. Over the last 4 decades (1980 - 2022), the total world population has increased by nearly 80%.
5. Majority of the population is concentrated in Asia followed by Africa.
6. Countries like Qatar and United Arab Emirates increased their population by nearly 8 times between 1980-2020.

7. Qatar, Jordan, and Oman have increased their population by 60% in the decade 2010-2020.
8. Some countries have had decrease in the population rather than increase and countries like Ukraine, Romania, Bulgaria, and Georgia have decreased their population the largest.

Conclusion:

Overall, we can see that there has been a significant increase in the world population over the last 4 decades with majority of the population in countries in Asia continent. This has led to huge growth in economy and culture over the years, but people should also keep in mind of running out of resources and overusing present resources of Earth.

References:

<https://www.kaggle.com/datasets/iamsouravbanerjee/world-population-dataset>

<https://worldpopulationreview.com/>