

Query 1

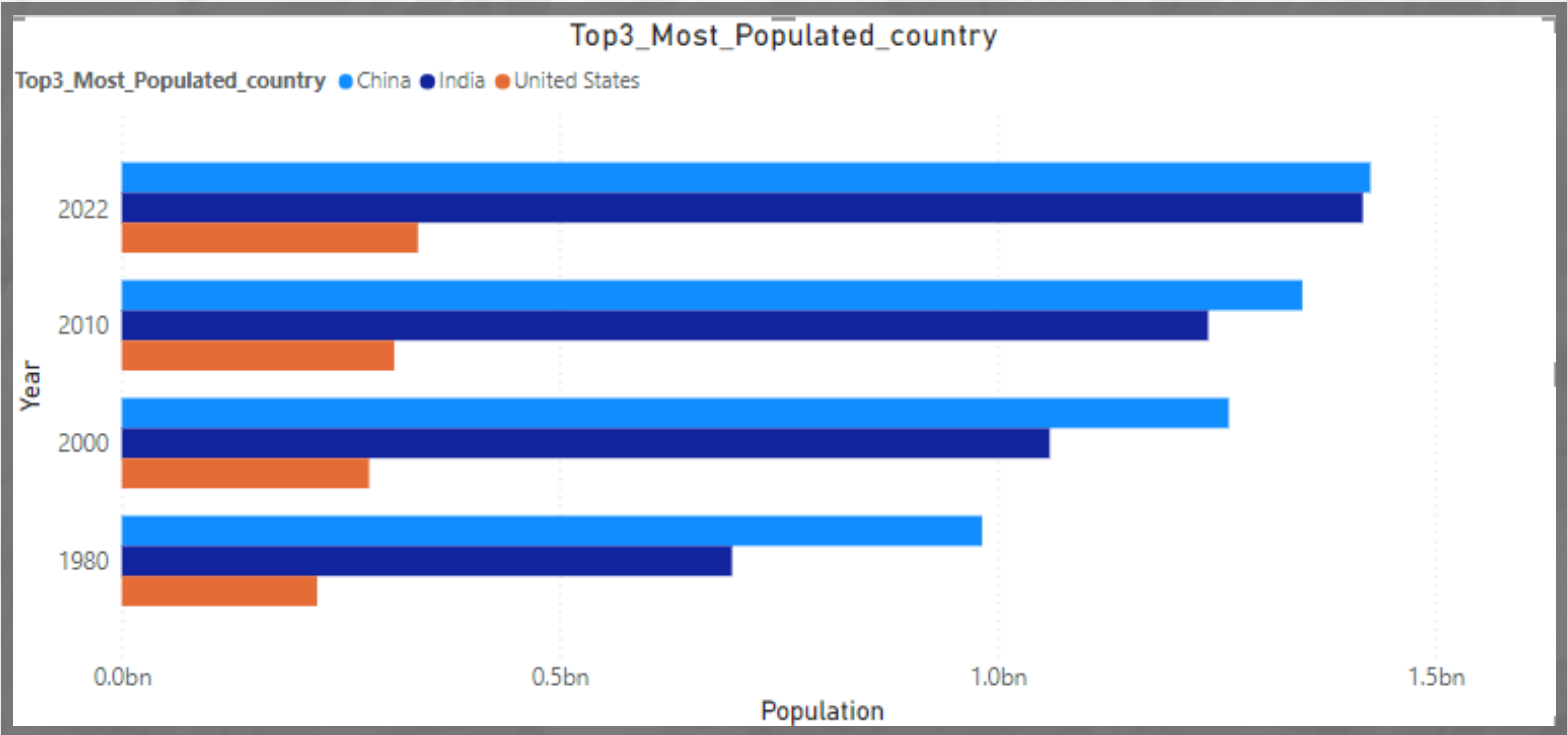
worldpopulationanalysis*



Limit to 1000 rows


```
64  /*Top 3 Countries With Highest Population In
65  1980, 2000, 2010, 2022 */
66
67  •  WITH CTE1 AS
68  (SELECT '2022' AS year, country AS Top3_Most_Populated_country, pop2022 AS population
69  FROM pop_data ORDER BY pop2022 DESC LIMIT 3),
70
71  CTE2 AS
72  (SELECT '2010' AS year, country AS Top3_Most_Populated_country, pop2010 AS population
73  FROM pop_data ORDER BY pop2010 DESC LIMIT 3),
74
75  CTE3 AS
76  (SELECT '2000' AS year, country AS Top3_Most_Populated_country, pop2000 AS population
77  FROM pop_data ORDER BY pop2000 DESC LIMIT 3),
78
79  CTE4 AS
80  (SELECT '1980' AS year, country AS Top3_Most_Populated_country, pop1980 AS population
81  FROM pop_data ORDER BY pop1980 DESC LIMIT 3)
82
83  SELECT * FROM CTE1
84  UNION
85  SELECT * FROM CTE2
86  UNION
87  SELECT * FROM CTE3
88  UNION
89  SELECT * FROM CTE4;
90
91
```

Result Grid			
		Filter Rows:	Export:
year	Top3_Most_Populated_country	population	
2022	China	1425887337	
2022	India	1417173173	
2022	United States	338289857	
2010	China	1348191368	
2010	India	1240613620	
2010	United States	311182845	
2000	China	1264099069	
2000	India	1059633675	
2000	United States	282398554	
1980	China	982372466	
1980	India	696828385	
1980	United States	223140018	




```
231
232  /*Showing the Population Estimation of 3 Most Populous Country
233  i.e. China, India, US */
234
235  • WITH CTE AS(SELECT country, pop2022, pop2030, pop2050,
236    ROUND((pop2030-pop2022)*100.0/pop2022,2) AS growth_rate_by2030 ,
237    ROUND((pop2050-pop2022)*100.0/pop2022,2) AS growth_rate_by2050
238    FROM pop_data
239    WHERE country_code IN ('IN','CN','US'))
240
241    SELECT country, pop2022, pop2030, pop2050,
242    CASE
243    WHEN growth_rate_by2030>0
244    THEN concat('+',growth_rate_by2030,'%')
245    ELSE concat(growth_rate_by2030,'%')
246    END as Growth_Rate2030,
247    CASE
248    WHEN growth_rate_by2050>0
249    THEN concat('+',growth_rate_by2050,'%')
250    ELSE concat(growth_rate_by2050,'%')
251    END as growth_rate2050
252    FROM CTE;
```

Result Grid




Filter Rows:

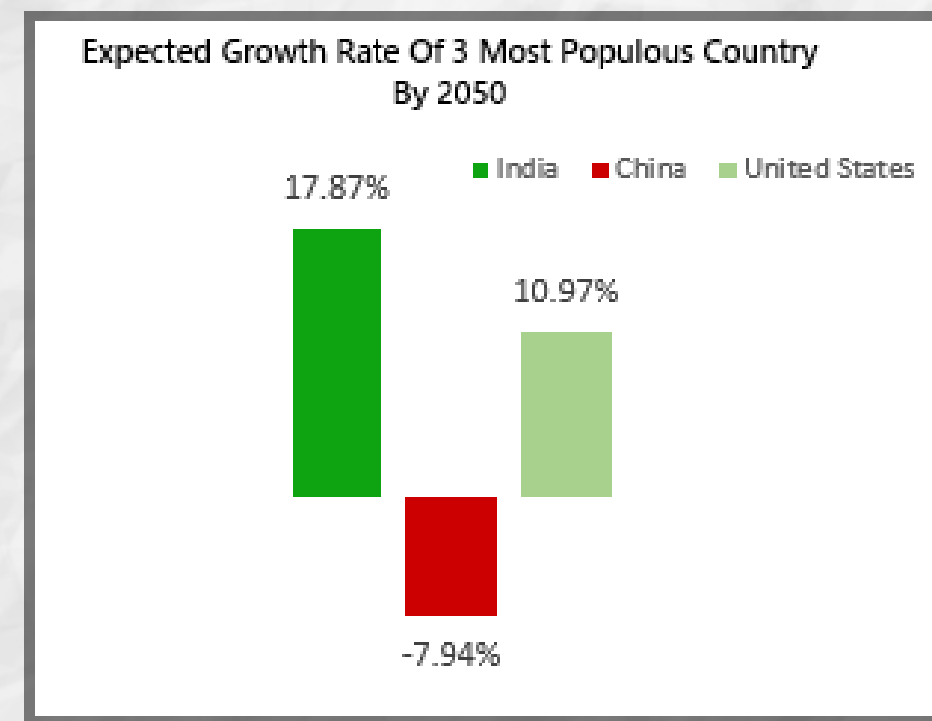
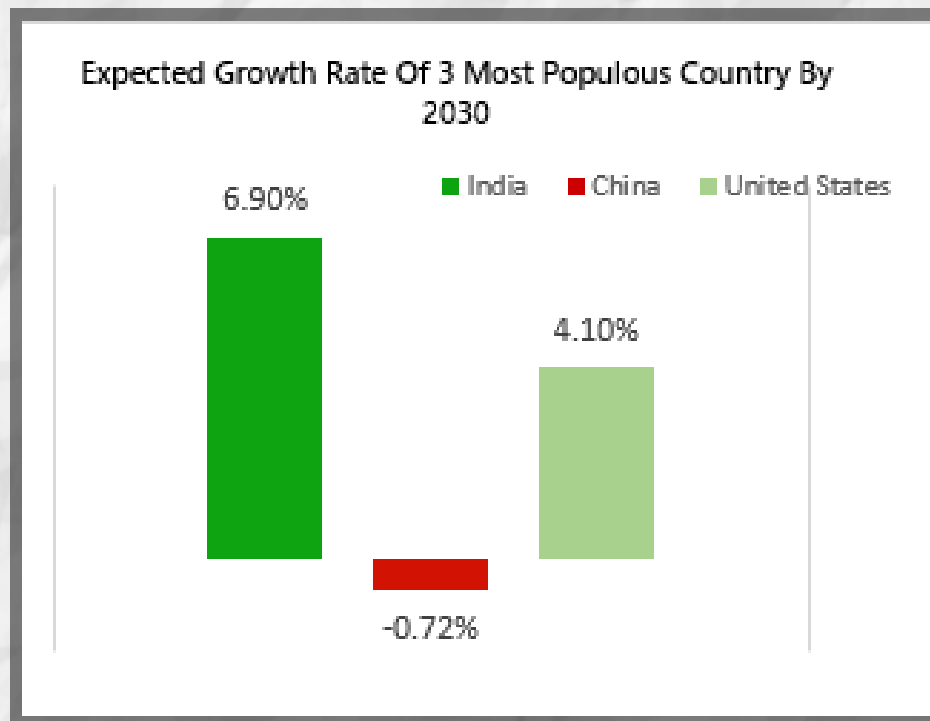
Export:



Wrap Cell Content:



	country	pop2022	pop2030	pop2050	Growth_Rate2030	growth_rate2050
▶	India	1417173173	1514994080	1670490596	+6.90%	+17.87%
	China	1425887337	1415605906	1312636325	-0.72%	-7.94%
	United States	338289857	352162301	375391963	+4.10%	+10.97%



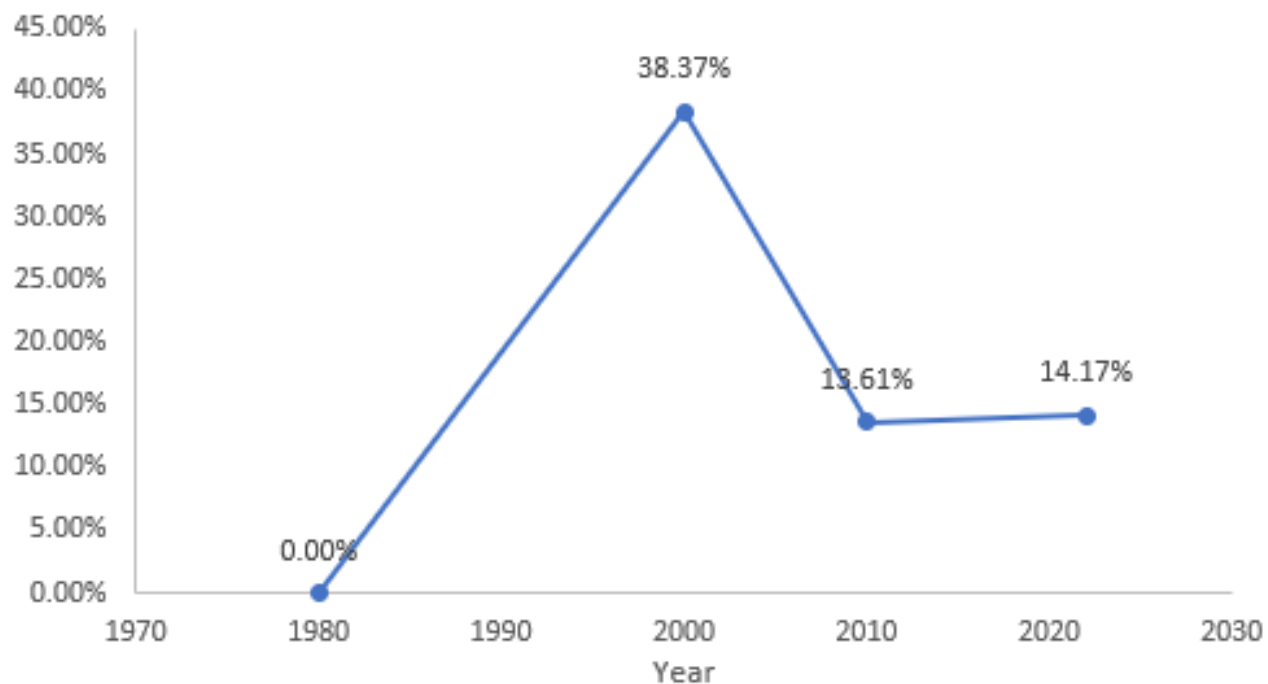
```
Query 1 | worldpopulationanalysis* x
Limit to 1000 rows

106 /*Showing Growth Rate Of World Population In Each Census Year*/
107
108 • WITH CTE AS
109   (SELECT
110     SUM(pop1980) as pop_1980,
111     SUM(pop2000) as pop_2000,
112     SUM(pop2010) as pop_2010,
113     SUM(pop2022) as pop_2022
114   FROM pop_data),
115   CTE2 AS(
116     SELECT "2022" AS year, pop_2022 AS population FROM CTE UNION
117     SELECT "2000" AS year, pop_2000 AS population FROM CTE UNION
118     SELECT "2010" AS year, pop_2010 AS population FROM CTE UNION
119     SELECT "1980" AS year, pop_1980 AS population FROM CTE),
120   CTE3 AS(
121     SELECT *, LEAD(population, 1, 0) OVER(ORDER BY year DESC) AS previous_yr_pop
122   FROM CTE2)
123
124   SELECT *,
125   CONCAT(ROUND((population-previous_yr_pop)*100.0/previous_yr_pop, 2), " % Increase") AS growth_rate
126 FROM CTE3;
127
128
```



Result Grid |  Filter Rows: | Export:  | Wrap

	year	population	previous_yr_pop	growth_rate
▶	2022	7973413043	6983785000	14.17 % Increase
	2010	6983785000	6147055703	13.61 % Increase
	2000	6147055703	4442400374	38.37 % Increase
	1980	4442400374	0	NULL

% Growth Of World Population Over Years



Query 1 worldpopulationanalysis x



```
28
29  /*Checking % Increase In population From
30   Previous Population census */
31  • WITH CTE1 AS
32  (
33      SELECT country, country_code, '1980' AS year, pop1980 AS population FROM pop_data
34      UNION
35      SELECT country, country_code, '2000' AS population, pop2000 AS population FROM pop_data
36      UNION
37      SELECT country, country_code, '2010' AS population, pop2010 AS population FROM pop_data
38      UNION
39      SELECT country, country_code, '2022' AS population,
40      pop2022 AS population FROM pop_data),
41
42      CTE2 AS
43      (
44          SELECT country, country_code, year,
45          LAG(year,1,0) OVER (PARTITION BY country ORDER BY year ASC) AS previous_yr, population ,
46          LAG(population,1,0) OVER (PARTITION BY country ORDER BY year ASC) AS previous_yr_pop
47          FROM CTE1 ORDER BY country
48      )
49
50      SELECT *,
51      CONCAT(
52          ROUND(IFNULL(((population-previous_yr_pop)*100.0/previous_yr_pop),''),2)," % Increase/Decrease from year ",previous_yr
53      )
54      AS population_growth
55      FROM CTE2;
```

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

	country	country_code	year	previous_yr	population	previous_yr_pop	population_growth
▶	Afghanistan	AF	1980	0	12486631	0	0 % Increase/Decrease from year 0
	Afghanistan	AF	2000	1980	19542982	12486631	56.51 % Increase/Decrease from year 1980
	Afghanistan	AF	2010	2000	28189672	19542982	44.24 % Increase/Decrease from year 2000
	Afghanistan	AF	2022	2010	41128771	28189672	45.9 % Increase/Decrease from year 2010
	Albania	AL	1980	0	2941651	0	0 % Increase/Decrease from year 0
	Albania	AL	2000	1980	3182021	2941651	8.17 % Increase/Decrease from year 1980
	Albania	AL	2010	2000	2913399	3182021	-8.44 % Increase/Decrease from year 2000
	Albania	AL	2022	2010	2842321	2913399	-2.44 % Increase/Decrease from year 2010
	Algeria	DZ	1980	0	18739378	0	0 % Increase/Decrease from year 0
	Algeria	DZ	2000	1980	30774621	18739378	64.22 % Increase/Decrease from year 1980
	Algeria	DZ	2010	2000	35856344	30774621	16.51 % Increase/Decrease from year 2000
	Algeria	DZ	2022	2010	44903225	35856344	25.23 % Increase/Decrease from year 2010
	American S...	AS	1980	0	32886	0	0 % Increase/Decrease from year 0
	American S...	AS	2000	1980	58230	32886	77.07 % Increase/Decrease from year 1980
	American S...	AS	2010	2000	54849	58230	-5.81 % Increase/Decrease from year 2000
	American S...	AS	2022	2010	44273	54849	-19.28 % Increase/Decrease from year 2010
	Andorra	AD	1980	0	35611	0	0 % Increase/Decrease from year 0
	Andorra	AD	2000	1980	66097	35611	85.61 % Increase/Decrease from year 1980
	Andorra	AD	2010	2000	71519	66097	8.2 % Increase/Decrease from year 2000
	Andorra	AD	2022	2010	79824	71519	11.61 % Increase/Decrease from year 2010
	Angola	AO	1980	0	8330047	0	0 % Increase/Decrease from year 0
	Angola	AO	2000	1980	16394062	8330047	96.81 % Increase/Decrease from year 1980
	Angola	AO	2010	2000	23364185	16394062	42.52 % Increase/Decrease from year 2000
	Angola	AO	2022	2010	35588987	23364185	52.32 % Increase/Decrease from year 2010

Result 1 ×

Query 1

worldpopulationanalysis*



Limit to 1000 rows



92 #Showing World's Population In All Population Census Years

93

94 • SELECT "World",

95 SUM(pop1980) as `population (in 1980)`,

96 SUM(pop2000) as `population (in 2000)`,

97 SUM(pop2010) as `population (in 2010)`,

98 SUM(pop2022) as `population (in 2022)`

99 FROM pop_data;

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<

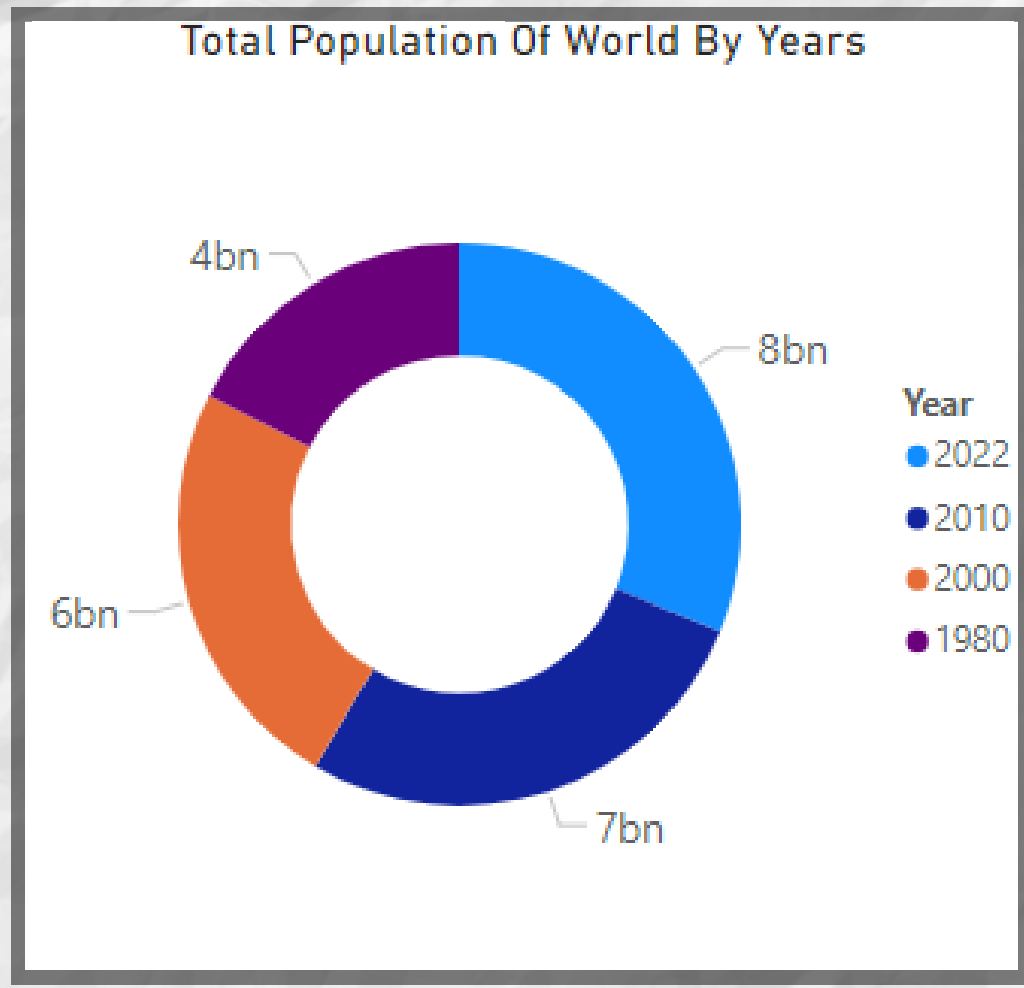
Result Grid

Filter Rows:

Export:

Wrap

	World	population (in 1980)	population (in 2000)	population (in 2010)	population (in 2022)
▶	World	4442400374	6147055703	6983785000	7973413043



```
Query 1 | worldpopulationanalysis* x
Limit to 1000 rows

142 #Predicting Growth Rate in 2030,2050 from 2022
143
144 • with CTE AS(SELECT country, pop2022, pop2030, pop2050,
145 ROUND((pop2030-pop2022)*100.0/pop2022,2) AS growth_rate_by2030 ,
146 ROUND((pop2050-pop2022)*100.0/pop2022,2) AS growth_rate_by2050
147 FROM pop_data)
148
149 SELECT country, pop2022, pop2030, pop2050,
150 CASE
151 WHEN growth_rate_by2030>0
152 THEN concat('+',growth_rate_by2030,'%')
153 ELSE concat(growth_rate_by2030,'%')
154 END as Growth_Rate2030,
155 CASE
156 WHEN growth_rate_by2050>0
157 THEN concat('+',growth_rate_by2050,'%')
158 ELSE concat(growth_rate_by2050,'%')
159 END as growth_rate2050
160 FROM CTE;
161
162
163
```

<div> <div>Result Grid</div> <div> <div></div> <div>Filter Rows:</div> <div></div> </div> <div> <div>Export:</div> <div></div> </div> <div> <div>Wrap Cell Content:</div> <div> <div></div> <div>IA</div> </div> </div> </div>						
	country	pop2022	pop2030	pop2050	Growth_Rate2030	growth_rate2050
▶	India	1417173173	1514994080	1670490596	+6.90%	+17.87%
	China	1425887337	1415605906	1312636325	-0.72%	-7.94%
	United States	338289857	352162301	375391963	+4.10%	+10.97%
	Indonesia	275501339	292150100	317225213	+6.04%	+15.14%
	Pakistan	235824862	274029836	367808468	+16.20%	+55.97%
	Nigeria	218541212	262580426	377459883	+20.15%	+72.72%
	Brazil	215313498	223908968	230885725	+3.99%	+7.23%
	Bangladesh	171186372	184424144	203904900	+7.73%	+19.11%
	Russia	144713314	141432741	133133035	-2.27%	-8.00%
	Mexico	127504125	134534107	143772364	+5.51%	+12.76%
	Ethiopia	123379924	149296378	214812309	+21.01%	+74.11%
	Japan	123951692	118514802	103784357	-4.39%	-16.27%
	Philippines	115559009	129453321	157891622	+12.02%	+36.63%
	Egypt	110990103	125151725	160339889	+12.76%	+44.46%
	DR Congo	99010212	127582053	217494003	+28.86%	+119.67%
	Vietnam	98186856	102699905	107012939	+4.60%	+8.99%
	Iran	88550570	92921017	99007204	+4.94%	+11.81%
	Turkey	85341241	88879698	95829258	+4.15%	+12.29%
	Germany	83369843	82762675	78932228	-0.73%	-5.32%
	Thailand	71697030	72060018	67880083	+0.51%	-5.32%
	United Kingdom	67508936	69175770	71684966	+2.47%	+6.19%
	Tanzania	65497748	81885304	129931520	+25.02%	+98.38%
	France	64626628	65543452	65827072	+1.42%	+1.86%
	South Africa	59893885	64659278	73529753	+7.96%	+22.77%

Query 1

worldpopulationanalysis*



164

165 #Showing Countries With Rapid Growth in years from 1980 to 2022

166 • **SELECT** country,pop1980,pop2022,

167 **ROUND**(100.0*(pop2022-pop1980)/pop1980,2) **AS** `growth_rate (in %)`

168 **FROM** pop_data

169 **ORDER BY** `growth_rate (in %)` **DESC**;

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176

Result Grid



Filter Rows:

Export:



Wrap Cell Content:



	country	pop1980	pop2022	growth_rate (in %)
▶	Qatar	277450	2695122	871.39
	United Arab Emirates	1014048	9441129	831.03
	Mayotte	52233	326101	524.32
	Turks and Caicos Islands	7598	45703	501.51
	Equatorial Guinea	282509	1674908	492.87
	Jordan	2216903	11285869	409.08
	Western Sahara	116775	575986	393.24
	French Guiana	66825	304557	355.75
	Oman	1017462	4576298	349.78
	Angola	8330047	35588987	327.24
	Niger	6173177	26207977	324.55
	Saint Martin	7776	31791	308.83
	Bahrain	362595	1472233	306.03
	Chad	4408230	17723315	302.05
	Cayman Islands	17100	68706	301.79
	Gambia	718586	2705992	276.57
	DR Congo	26708686	99010212	270.70
	Saint Barthelemy	2983	10967	267.65
	Yemen	9204938	33696614	266.07
	Palestine	1453620	5250072	261.17
	Sint Maarten	12243	44175	260.82
	Saudi Arabia	10171710	36408820	257.94
	Uganda	13284026	47249585	255.69
	Ethiopia	24045450	122270024	252.06

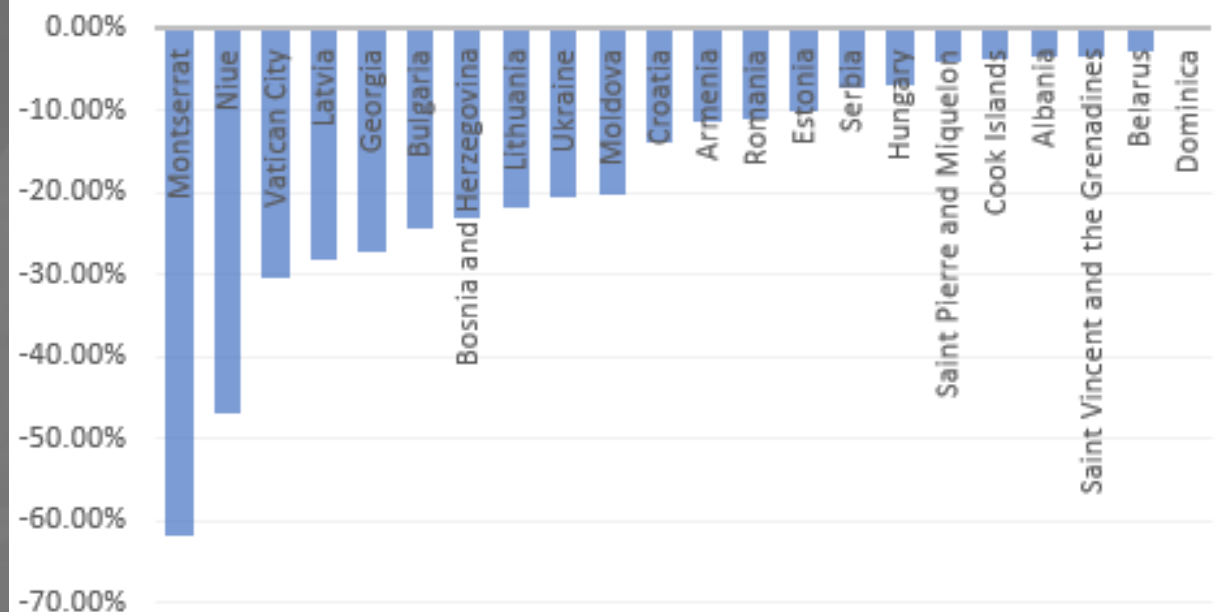
```
Query 1 worldpopulationanalysis x
Limit to 1000 rows

173
174 #Showing countries with Population Decline in years from 1980-2022
175
176 • SELECT * FROM
177 (
178 SELECT country,pop1980,pop2022,
179 ROUND(100.0*(pop2022-pop1980)/pop1980,2) AS `growth_rate (in %)`
180 FROM pop_data
181 ORDER BY `growth_rate (in %)` ASC
182 )X
183 WHERE `growth_rate (in %)`<0;
184
185
186
187
188
189
```


Result Grid   Filter Rows: Export:  Wra

	country	pop1980	pop2022	growth_rate (in %)
►	Montserrat	11452	4390	-61.67
	Niue	3637	1934	-46.82
	Vatican City	733	510	-30.42
	Latvia	2572037	1850651	-28.05
	Georgia	5145843	3744385	-27.23
	Bulgaria	8980606	6781953	-24.48
	Bosnia and Herzegovina	4199820	3233526	-23.01
	Lithuania	3521206	2750055	-21.90
	Ukraine	49973920	39701739	-20.56
	Moldova	4103240	3272996	-20.23
	Croatia	4680144	4030358	-13.88
	Armenia	3135123	2780469	-11.31
	Romania	22125224	19659267	-11.15
	Estonia	1476983	1326062	-10.22
	Serbia	7777010	7221365	-7.14
	Hungary	10698679	9967308	-6.84
	Saint Pierre and Miquelon	6106	5862	-4.00
	Cook Islands	17651	17011	-3.63
	Albania	2941651	2842321	-3.38
	Saint Vincent and the G...	107480	103948	-3.29
	Belarus	9817257	9534954	-2.88
	Dominica	72978	72737	-0.33

Top10 Countries With Highest Decline From 1980-2022



Query 1 worldpopulationanalysis* x

Limit to 1000 rows

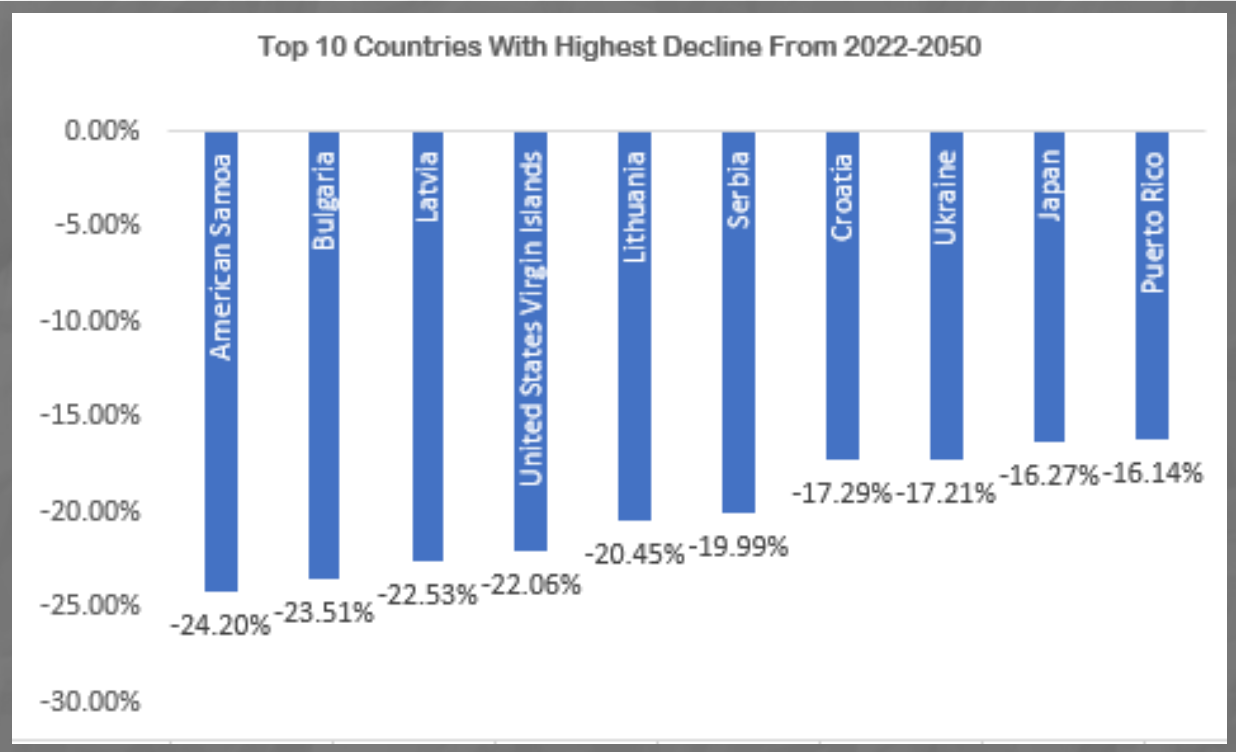
```
187
188   #Showing Top 10 Countries Which are Expected to Grow Rapidly by 2050
189 • with CTE AS
190   (
191   SELECT country, pop2022, pop2050,
192   ROUND((pop2050-pop2022)*100.0/pop2022,2) AS `growth_by_2050 (in %)`
193   FROM pop_data
194   )
195
196   SELECT * FROM CTE
197   WHERE `growth_by_2050 (in %)` >0
198   ORDER BY `growth_by_2050 (in %)` DESC LIMIT 10;
199
200
201
202
```


Result Grid				
Filter Rows: <input type="text"/>				
Export: <input type="button" value="Export"/>				
Wrap Cell Contents				
	country	pop2022	pop2050	growth_by_2050 (in %)
▶	Niger	26207977	67043296	155.81
	DR Congo	99010212	217494003	119.67
	Mali	22593590	47439802	109.97
	Somalia	17597511	36462830	107.20
	Central African Republic	5579144	11533423	106.72
	Chad	17723315	36452035	105.67
	Mayotte	326101	664141	103.66
	Angola	35588987	72328068	103.23
	Tanzania	65497748	129931520	98.38
	Mozambique	32969518	63044497	91.22




```
208
209     #Showing Top 10 Countries Which are Expected to Decline Rapidly by 2050
210 • with CTE AS
211 (
212     SELECT country, pop2022, pop2050,
213     ROUND((pop2050-pop2022)*100.0/pop2022,2) AS `growth_by_2050 (in %)`
214     FROM pop_data
215 )
216
217     SELECT * FROM CTE
218     WHERE `growth_by_2050 (in %)` <0
219     ORDER BY `growth_by_2050 (in %)` LIMIT 10;
220
```

Result Grid				
Filter Rows:		Export:		
country	pop2022	pop2050	growth_by_2050 (in %)	
American Samoa	44273	33557	-24.20	
Bulgaria	6781953	5187392	-23.51	
Latvia	1850651	1433728	-22.53	
United States Virgin Islands	99465	77519	-22.06	
Lithuania	2750055	2187550	-20.45	
Serbia	7221365	5777806	-19.99	
Croatia	4030358	3333425	-17.29	
Ukraine	39701739	32867719	-17.21	
Japan	123951692	103784357	-16.27	
Puerto Rico	3252407	2727624	-16.14	







```
260 #Showing 5 Most Populous Expected Countries By 2050
261 • SELECT country, country_code, pop2050 AS population
262 FROM pop_data
263 ORDER BY pop2050 DESC LIMIT 5;
264
265
```

	country	country_code	population
▶	India	IN	1670490596
	China	CN	1312636325
	Nigeria	NG	377459883
	United States	US	375391963
	Pakistan	PK	367808468

#Expected Population Of World By 2030 & 2050

- ```
SELECT "world", SUM(pop2022) AS `Population (in 2022)`, SUM(pop2030) AS `Population (in 2030)`,
SUM(pop2050) AS `Population (in 2050)`,
CONCAT(ROUND(100.0*(SUM(pop2030)-SUM(pop2022))/SUM(pop2022),2),'%') AS growthby2030,
CONCAT(ROUND(100.0*(SUM(pop2050)-SUM(pop2022))/SUM(pop2022),2),'%') AS growthby2050
FROM pop_data ;
```



|             |       |                                                                                   |                                                                                   |                                   |                                                                                             |                                                                                                        |
|-------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Result Grid |       |  |  | Filter Rows: <input type="text"/> | Export:  | Wrap Cell Content:  |
|             | world | Population (in 2022)                                                              | Population (in 2030)                                                              | Population (in 2050)              | growthby2030                                                                                | growthby2050                                                                                           |
| ▶           | world | 7973413043                                                                        | 8544417648                                                                        | 9707789237                        | 7.16%                                                                                       | 21.75%                                                                                                 |

```
#Showing 10 Most Populous Countries In 2022
SELECT country, country_code, pop2022 AS population
FROM pop_data
ORDER BY pop2022 DESC LIMIT 10;
```

Result Grid



Filter Rows:

|   | country       | country_code | population |
|---|---------------|--------------|------------|
| ▶ | China         | CN           | 1425887337 |
|   | India         | IN           | 1417173173 |
|   | United States | US           | 338289857  |
|   | Indonesia     | ID           | 275501339  |
|   | Pakistan      | PK           | 235824862  |
|   | Nigeria       | NG           | 218541212  |
|   | Brazil        | BR           | 215313498  |
|   | Bangladesh    | BD           | 171186372  |
|   | Russia        | RU           | 144713314  |
|   | Mexico        | MX           | 127504125  |

Query 1

worldpopulationanalysis\* x



Limit to 1000 rows



128

129     #Showing Population Density of All countries Over All Census Years

130

131 •     **SELECT** country, country\_code,

132     ROUND(pop1980/landAreaKm,2) **as** Density\_1980,

133     ROUND(pop2000/landAreaKm,2) **as** Density\_2000,

134     ROUND(pop2010/landAreaKm,2) **as** Density\_2010,

135     ROUND(pop2022/landAreaKm,2) **as** Density\_2022

136     **FROM** pop\_data;

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Result Grid



Filter Rows:

Export:



Wrap Cell Content:



|   | country        | country_code | Density_1980 | Density_2000 | Density_2010 | Density_2022 |
|---|----------------|--------------|--------------|--------------|--------------|--------------|
| ▶ | India          | IN           | 234.37       | 356.4        | 417.27       | 476.65       |
|   | China          | CN           | 104.23       | 134.13       | 143.05       | 151.29       |
|   | United States  | US           | 24.39        | 30.87        | 34.02        | 36.98        |
|   | Indonesia      | ID           | 78.92        | 114.02       | 129.97       | 146.74       |
|   | Pakistan       | PK           | 104.59       | 200.25       | 252.25       | 305.92       |
|   | Nigeria        | NG           | 80.1         | 134.89       | 176.72       | 239.95       |
|   | Brazil         | BR           | 14.63        | 21.04        | 23.49        | 25.76        |
|   | Bangladesh     | BD           | 644.77       | 992.5        | 1139.98      | 1315.1       |
|   | Russia         | RU           | 8.44         | 8.97         | 8.75         | 8.84         |
|   | Mexico         | MX           | 34.83        | 50.35        | 57.89        | 65.59        |
|   | Ethiopia       | ET           | 30.96        | 59.4         | 79.07        | 109.32       |
|   | Japan          | JP           | 322.7        | 347.88       | 351.46       | 340.06       |
|   | Philippines    | PH           | 162.39       | 261.46       | 317.39       | 387.56       |
|   | Egypt          | EG           | 43.95        | 71.7         | 87.65        | 111.5        |
|   | DR Congo       | CD           | 11.78        | 21.44        | 29.29        | 43.67        |
|   | Vietnam        | VN           | 169          | 252.05       | 278.89       | 313.27       |
|   | Iran           | IR           | 23.74        | 40.4         | 46.46        | 54.58        |
|   | Turkey         | TR           | 56.27        | 81.82        | 93.41        | 108.91       |
|   | Germany        | DE           | 222.64       | 233.41       | 232.76       | 238.62       |
|   | Thailand       | TH           | 89.53        | 123.44       | 133.63       | 140.34       |
|   | United Kingdom | GB           | 232.82       | 243.25       | 259.41       | 279.04       |
|   | Tanzania       | TZ           | 21.79        | 38.91        | 50.93        | 73.94        |
|   | France         | FR           | 98.1         | 107.14       | 114.04       | 118.03       |
|   | South Africa   | ZA           | 24.29        | 38.59        | 42.69        | 49.37        |