Solution1

SQLQuery2.sql - I...AMING\Lenovo (54))* ⊹ ✕
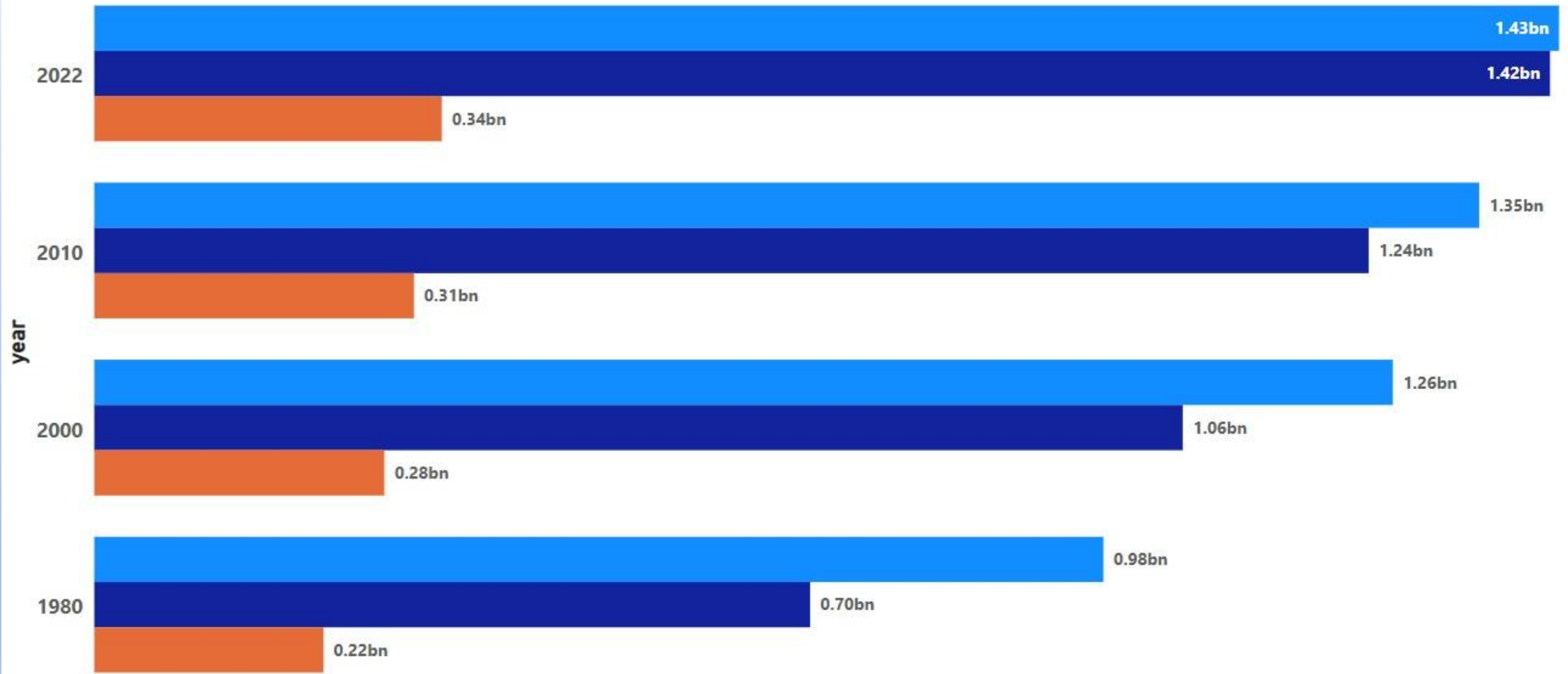
```sql
      /* Top 3 Most Populated Countries in 1980, 2000, 2022
         China, India, US */

SELECT
    Country,
    pop1980 AS YEAR_1980,
    pop2000 AS YEAR_2000,
    pop2022 AS YEAR_2022
FROM
    WorldPopulation
WHERE
    Country IN ('INDIA', 'CHINA', 'UNITED STATES')
```

▦ Results   📊 Messages

	Country	YEAR_1980	YEAR_2000	YEAR_2022
1	India	696828385	1059633675	1417173173
2	China	982372466	1264099069	1425887337
3	United States	223140018	282398554	338289857

Population of Top 3 Countries by Year

Top3_Most_Populated_country ● China ● India ● United States

2022
- China: 1.43bn
- India: 1.42bn
- United States: 0.34bn

2010
- China: 1.35bn
- India: 1.24bn
- United States: 0.31bn

2000
- China: 1.26bn
- India: 1.06bn
- United States: 0.28bn

1980
- China: 0.98bn
- India: 0.70bn
- United States: 0.22bn

year

Solution1

SQLQuery1.sql - I...AMING\Lenovo (54))* + ×

```sql
1         -- Showing 10 Most Populous Expected Countries By 2050
2
3   ⊟     SELECT TOP 10
4             Country,
5             pop2050 AS POPULATION_BY_2050
6         FROM
7             WorldPopulation
8         ORDER BY
9             POPULATION_BY_2050 DESC
10
```
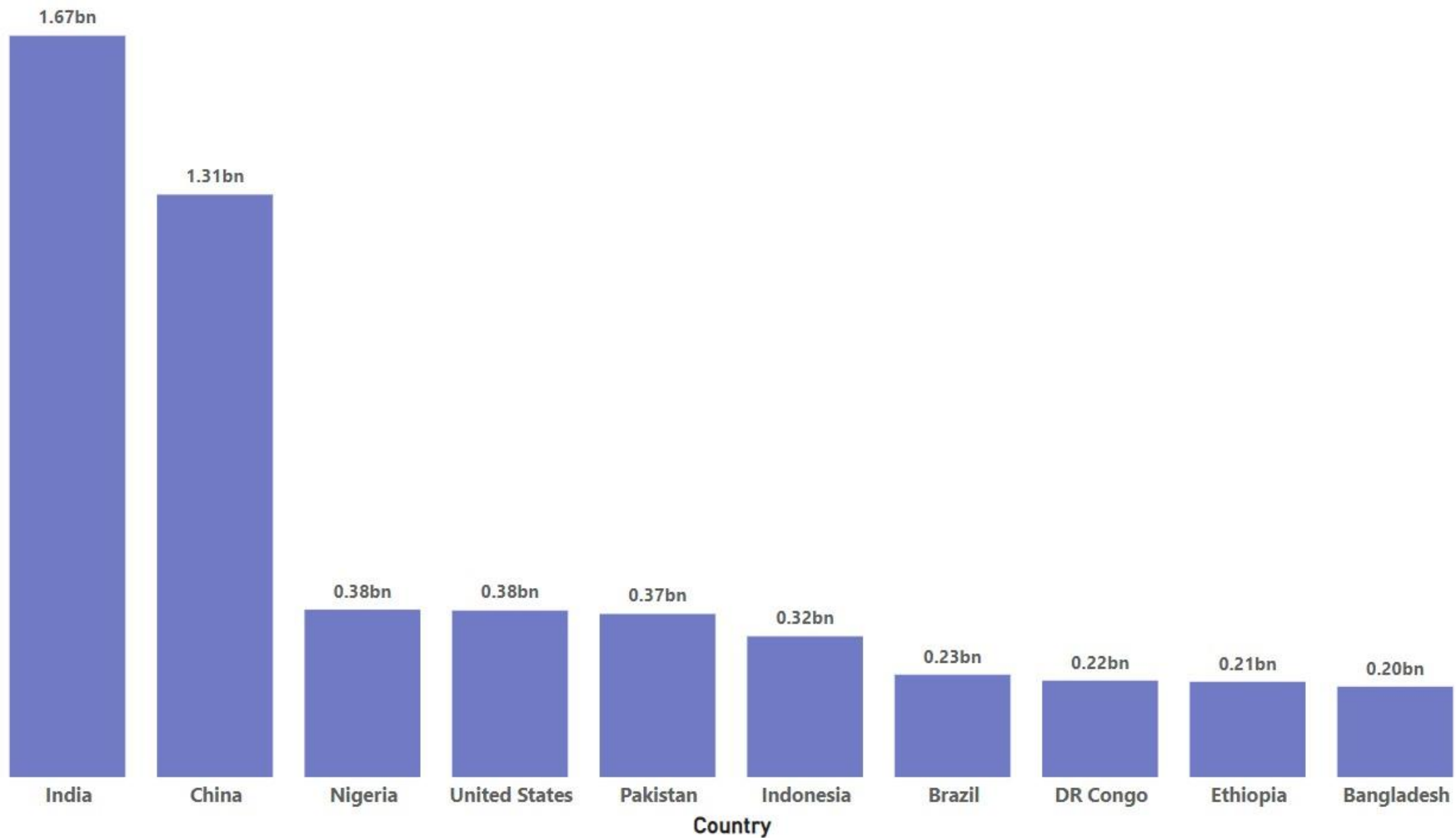
	Country	EEXPECTED_POPULATION_BY_2050
1	India	1670490596
2	China	1312636325
3	Nigeria	377459883
4	United States	375391963
5	Pakistan	367808468
6	Indonesia	317225213
7	Brazil	230885725
8	DR Congo	217494003
9	Ethiopia	214812309
10	Bangladesh	203904900

Results   Messages

Expected Population by 2050

Country	Expected Population
India	1.67bn
China	1.31bn
Nigeria	0.38bn
United States	0.38bn
Pakistan	0.37bn
Indonesia	0.32bn
Brazil	0.23bn
DR Congo	0.22bn
Ethiopia	0.21bn
Bangladesh	0.20bn

```sql
-- Top 10 Countries Which are Expected to Grow Rapidly by 2050

SELECT
    TOP 10
    Country, pop2022 AS YEAR_2022, pop2050 AS YEAR_2050,
    CAST( 100.0* (pop2050 - pop2022) / pop2022 AS decimal(18,2))
    AS GROWTH_RATE_PERCENTAGE
FROM
    WorldPopulation
ORDER BY
    GROWTH_RATE_PERCENTAGE DESC
```

⊞ Results   📄 Messages

	Country	YEAR_2022	YEAR_2050	GROWTH_RATE_PERCENTAGE
1	Niger	26207977	67043296	155.81
2	DR Congo	99010212	217494003	119.67
3	Mali	22593590	47439802	109.97
4	Somalia	17597511	36462830	107.20
5	Central African Republic	5579144	11533423	106.72
6	Chad	17723315	36452035	105.67
7	Mayotte	326101	664141	103.66
8	Angola	35588987	72328068	103.23
9	Tanzania	65497748	129931520	98.38
10	Mozambique	32969518	63044497	91.22

Expected Growth Rate from 2022 to 2050
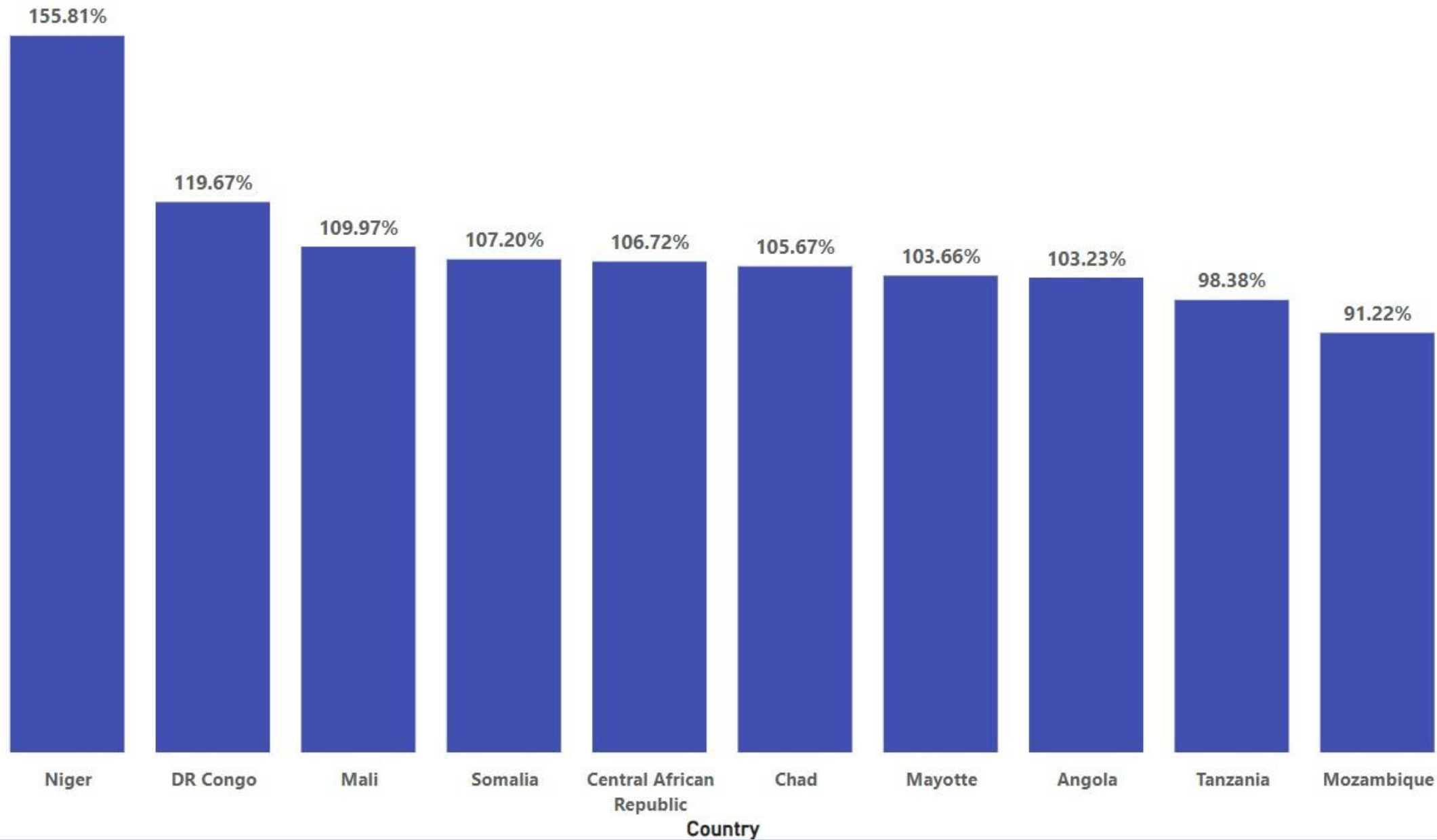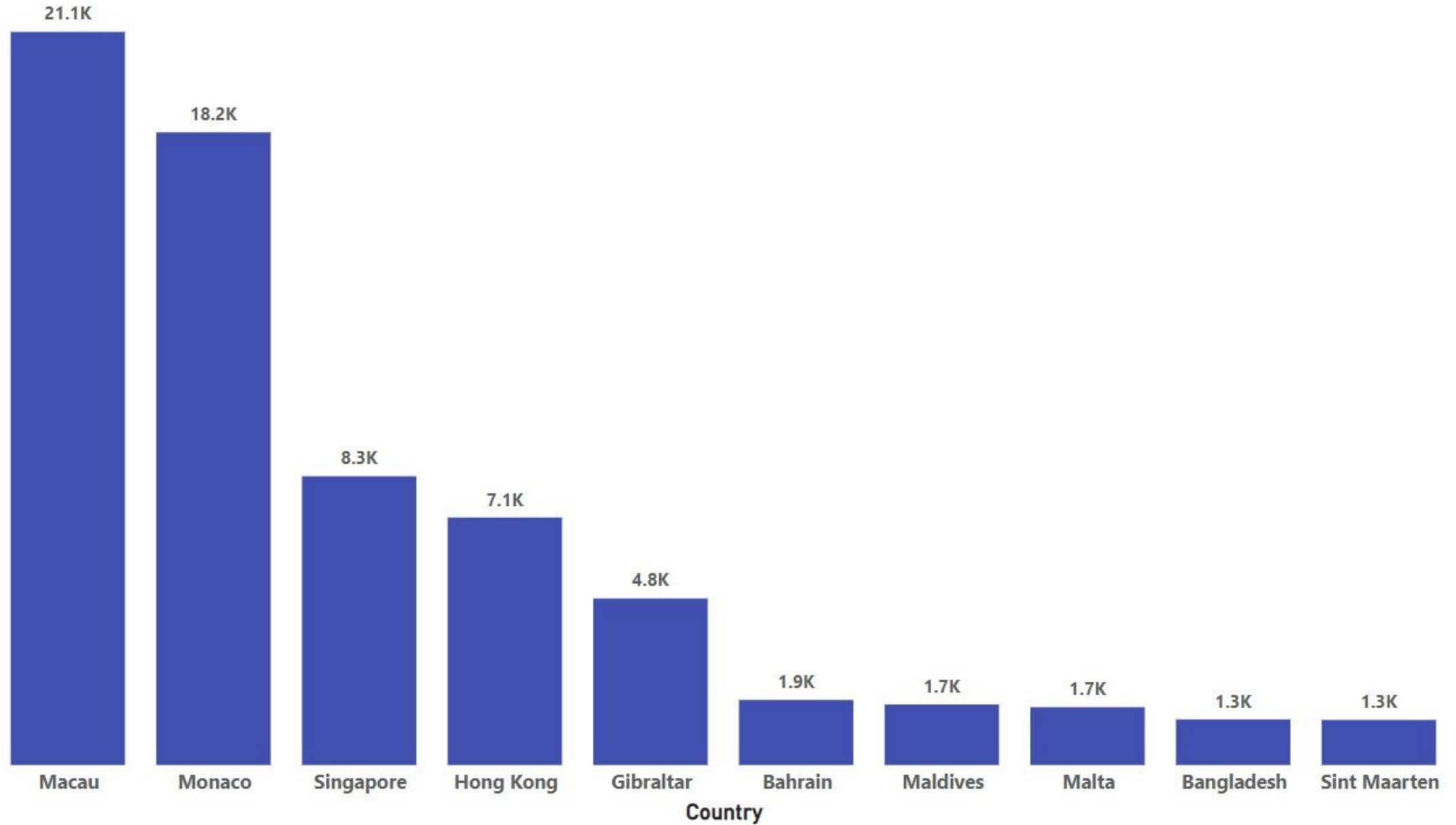
Solution1

SQLQuery4.sql - I...AMING\Lenovo (52))* ⌐ X

```sql
1    -- Showing top 10 Densly Populated countries Over in 2022
2
3    SELECT
4        top 10
5        Country,
6        CAST(pop2022/landAreaKm AS decimal(18,2)) AS Population_Density_2022
7    FROM
8        WorldPopulation
9    order by
10        Population_Density_2022 desc
```

▦ Results ▤ Messages

	Country	Population_Density_2022
1	Macau	21129.73
2	Monaco	18234.50
3	Singapore	8322.69
4	Hong Kong	7132.25
5	Gibraltar	4801.32
6	Bahrain	1875.46
7	Maldives	1745.96
8	Malta	1666.52
9	Bangladesh	1315.10
10	Sint Maarten	1299.26

Top10 Densely Populated Countries in 2022

21.1K

18.2K

8.3K

7.1K

4.8K

1.9K   1.7K   1.7K   1.3K   1.3K

Macau   Monaco   Singapore   Hong Kong   Gibraltar   Bahrain   Maldives   Malta   Bangladesh   Sint Maarten

Country

Solution1

SQLQuery5.sql - I...AMING\Lenovo (52))* + ×

```sql
1
2        /*Showing Growth Rate Of World Population In Each Census Year*/
3
4   ⊟    with CTE as
5        (
6        SELECT
7            SUM(pop1980) AS POP_1980,
8            SUM(pop2000) AS POP_2000,
9            SUM(pop2010) AS POP_2010,
10           SUM(pop2022) AS POP_2022
11       FROM WorldPopulation),
12       CTE2 AS(
13           SELECT '2022' AS YEAR, POP_2022 AS POPULATION FROM CTE UNION
14           SELECT '2010' AS YEAR, POP_2010 AS POPULATION FROM CTE UNION
15           SELECT '2000' AS YEAR, POP_2000 AS POPULATION FROM CTE UNION
16           SELECT '1980' AS YEAR, POP_1980 AS POPULATION FROM CTE ),
17       CTE3 AS(
18           SELECT *,
19               LEAD(POPULATION,1,0) OVER(ORDER BY YEAR DESC) AS PREVIOUS_YEAR_POPULATION
20           FROM CTE2
21       )
22           SELECT *,
23           CASE
24               WHEN PREVIOUS_YEAR_POPULATION = 0 THEN NULL
25               ELSE CAST(100.0*(POPULATION - PREVIOUS_YEAR_POPULATION) / PREVIOUS_YEAR_POPULATION AS DECIMAL(18,2))
26               END AS GROWTH_RATE
27           FROM
28               CTE3
```
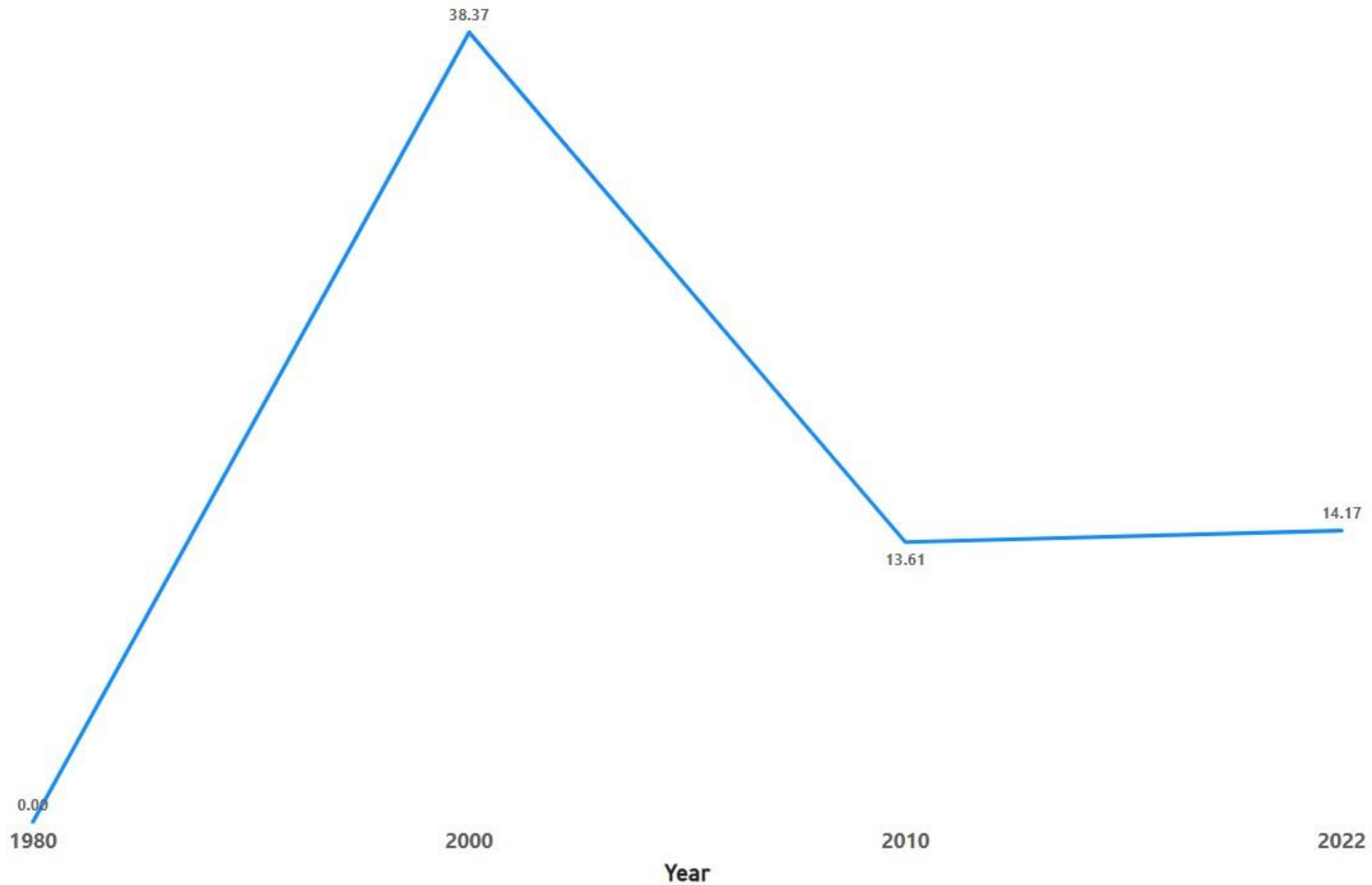
▦ Results ▤ Messages

	YEAR	POPULATION	PREVIOUS_YEAR_POPULATION	GROWTH_RATE
1	2022	7973413043	6983785000	14.17
2	2010	6983785000	6147055703	13.61
3	2000	6147055703	4442400374	38.37
4	1980	4442400374	0	NULL

World Population Change Percentage by Year

Solution1

SQLQuery6.sql - I...AMING\Lenovo (56))* + ×

```sql
1    --  Top 10 Countries With Rapid Population Growth in years from 1980 to 2022
2
3    SELECT
4        TOP 10
5        Country,
6        pop1980,
7        pop2022,
8        cast(100.0 * (pop2022-pop1980)/pop1980 as decimal(18,2)) AS GROWTH_RATE_PERCENTAGE
9    FROM
10       WorldPopulation
11   ORDER BY
12       GROWTH_RATE_PERCENTAGE DESC
```

▦ Results   ▤ Messages

	Country	pop1980	pop2022	GROWTH_RATE_PERCENTAGE
1	Qatar	277450	2695122	871.39
2	United Arab Emirates	1014048	9441129	831.03
3	Mayotte	52233	326101	524.32
4	Turks and Caicos Islands	7598	45703	501.51
5	Equatorial Guinea	282509	1674908	492.87
6	Jordan	2216903	11285869	409.08
7	Western Sahara	116775	575986	393.24
8	French Guiana	66825	304557	355.75
9	Oman	1017462	4576298	349.78
10	Angola	8330047	35588987	327.24

Population Growth Rate of from 1980 to 2022