ASSIGNMENT – SQL

ANALYZING THE WORLD POPULATION

Problem: In this project, you will use the dataset by CIA World Fact book and explore how the world population spreads across different countries. The data has information from only 261 different countries.

--- **We are using SQL to solve these problems.**

P1: Which Country has the highest population?

```
-----------------------------------------COUNTRY WITH HIGHEST POPULATION---------------------------------
----------------------------IGNORE COUNTRY WITH POPULATION AS NA (REPLACED WITH 0 FOR EASY ANALYSIS)----------

    SELECT COUNTRY,MAX(POPULATION) FROM WORLD_POPULATION
    WHERE POPULATION = (SELECT MAX(POPULATION) FROM WORLD_POPULATION)
```

Output

	COUNTRY	MAX(POPULATION)
▶	China	1355692576

P2: Which Country has the least population?

```
-----------------------------------------COUNTRY WITH LOWEST POPULATION---------------------------------
    SELECT COUNTRY,MAX(POPULATION) FROM WORLD_POPULATION
    WHERE POPULATION = (SELECT MIN(NULLIF(POPULATION,0)) FROM WORLD_POPULATION)
```

Output:

	COUNTRY	MAX(POPULATION)
▶	Pitcairn Islands	48

P3: Which Country has the highest growth rate?

```
-----------------------------------------COUNTRY WITH HIGHEST GROWTH RATE---------------------------------
    SELECT COUNTRY,MAX(POPULATION_GROWTH_RATE) AS MAX_GROWTH_RATE FROM WORLD_POPULATION
    WHERE POPULATION_GROWTH_RATE = (SELECT MAX(POPULATION_GROWTH_RATE) FROM WORLD_POPULATION)
```

Output:

COUNTRY	MAX_GROWTH_RATE
Lebanon	9

P4: Which is the most densely populated country?.

```
-----------------------------------------MOST DENSELY POPULATED COUNTRY ------------------------------------

        SELECT COUNTRY,MAX(POPULATION/AREA) AS MAX_POPULATION_DENSITY FROM
        WORLD_POPULATION
        WHERE (POPULATION/AREA) = (SELECT MAX(POPULATION/AREA) FROM WORLD_POPULATION)
```

Output:

COUNTRY	MAX_POPULATION_DENSITY
Macau	20996.9286

Output:

LABEL	AVERAGE_SEVERITY
Van / Goods 3.5 tonnes mgw or under	2.8508
Car	2.8665
Pedal cycle	2.8108
Motorcycle 125cc and under	2.7807
Motorcycle over 500cc	2.5849
Taxi/Private hire car	2.8814
Motorcycle over 125cc and up to 500cc	2.6904
Bus or coach (17 or more pass seats)	2.8576
Goods over 3.5t. and under 7.5t	2.8109
Goods 7.5 tonnes mgw and over	2.7341
Motorcycle 50cc and under	2.8266
Other vehicle	2.7784
Agricultural vehicle	2.6786
Minibus (8 - 16 passenger seats)	2.8173
Tram	2.8889
Mobility scooter	2.7162
Goods vehicle - unknown weight	2.8390
Electric motorcycle	2.4444
Motorcycle - unknown cc	2.6945
Ridden horse	2.8318
Data missing or out of range	2.8103

P4: Calculate the Average Severity and Total Accidents by Motorcycle

```
SELECT M.LABEL,A.ACCIDENT_SEVERITY AS SEVERITY ,AVG(ACCIDENT_SEVERITY) AS AVERAGE_SEVERITY
FROM ACCIDENTS A
INNER JOIN VEHICLES V
ON A.Accident_Index = V.Accident_Index
INNER JOIN (SELECT * FROM VEHICLE_TYPES WHERE LABEL LIKE '%MOTORCYCLE%') M
ON V.VEHICLE_TYPE = M.CODE
GROUP BY LABEL
```

Output:

LABEL	SEVERITY	AVERAGE_SEVERITY
Motorcycle 125cc and under	3	2.7807
Motorcycle over 500cc	3	2.5849
Motorcycle over 125cc and up to 500cc	3	2.6904
Motorcycle 50cc and under	3	2.8266
Motorcycle - unknown cc	3	2.6945
Electric motorcycle	3	2.4444