Intro to Computer Science 420-121-VA

Assignment 3

Geon Kim, Elia Morhej, Brandon Nguyen

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Teacher: Tassia Camoes-Araujo

Assignment 3

Theme: Gas emissions

Table 1

This table provides information about 7 different countries’ total billion tons of CO2 emissions in 2016 and their population count in 2016. Finally, the third row for each country will use a formula to display the tons of CO2 emissions per person in that country (per capita).

In the chart the population of each country is discarded because of the disparity of the numbers with the two other statistics. The chart is a way to visualize which country’s emission problems are on an individual level and which are not.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Country: | China | USA | India | Japan | Canada | Russia | Saudi Arabia |
|  | Total GtCO2: | 9.0568 | 4.8331 | 2.0768 | 1.1471 | 0.5408 | 1.4386 | 0.5272 |
|  | Population in M: | 1434 | 329.1 | 1366 | 126.9 | 37.4 | 145.8 | 34.3 |
|  | tCO2 / CAPITA: | 6.316 | 14.69 | 1.52 | 9.0394 | 14.46 | 9.86694 | 15.37 |

Table 2

This table shows the emissions of CO2 per continent, the average amount of CO2 emissions per person for each continent, and the percentage of total worldwide emissions, all during the year of 2017. This table adds new information to the prior one, by showing us where in the world most of the emissions are coming from.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Continent | Asia | North America | Europe | Africa | South America | Total |
| Population  (billion) | 4.181 | 0.490 | 0.743 | 1.255 | 0.424 | 7.6 |
| CO2 (billion tons) | 16.918 | 6.333 | 5.693 | 1.332 | 1.147 | 36.153 |
| Percentage of all emissions | 46.8% | 17.5% | 15.7% | 3.6% | 3.1% | 100% |
| (tons)CO2/  capita | 4.0 | 13 | 7.7 | 1.1 | 2.7 | **-** |

\*\*total refers to the entire planet

 Data Interpretation

This topic is interesting for many reasons. A more specific fun aspect of it is that the statistics for the tons of CO2 emissions per capita do not always align with one’s expectations. Let’s take China as an example. Judging by their total CO2 emissions, you’d expect their tons of CO2 emissions per capita to be decently high, however it’s less than half of Canada’s, and the latter country’s total CO2 emissions don’t even come close to China’s.

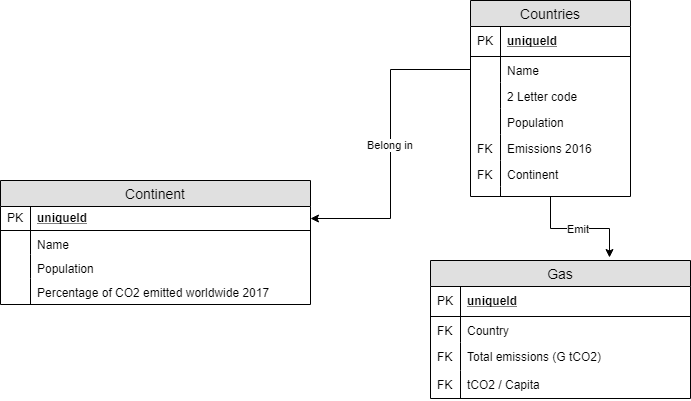
Taking China as an example again, by analyzing these statistics, we can say the huge amount of CO2 they produce is very barely the majority of the population’s fault.

Furthermore, almost half the total global CO2 emissions came from Asia in 2017, and as we all know, Asia’s population is much less privileged and rich than other parts of the world such as Europe and North America. This must mean that a minority is responsible for most of the CO2 emissions worldwide, whom are all probably factory owners and huge companies.

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Entity Relation Diagram



References

1. www.globalcarbonatlas.org/en/CO2-emissions
2. ucsusa.org/global-warming/science-and-impacts/science/each-countrys-share-of-co2.html
3. worldometers.info/geography/countries-of-the-world/