[1] "Hypothesis 1: Most emissions come from the US and 2nd China, with India relatively high, other first world countries are a little lower, 3rd world countries are the least"

[1] "Hypothesis 2: US, China and first world countries have reduced their share of emissions over time"

> print(top\_10\_cap)

# A tibble: 10 × 2

Entity Total\_Per\_Capita

*<chr>* *<dbl>*

1 Sint Maarten (Dutch part) 148.

2 Curacao 50.5

3 Qatar 45.7

4 United Arab Emirates 28.8

5 Kuwait 28.5

6 Luxembourg 25.6

7 Bahrain 19.5

8 Aruba 13.2

9 Trinidad and Tobago 13.1

10 New Caledonia 12.3

> print(top\_20\_cum)

# A tibble: 20 × 2

Entity Total\_Cum

*<chr>* *<dbl>*

1 World 100.

2 High-income countries 90.2

3 Europe 69.4

4 European Union (28) 65.7

5 Europe (excl. EU-27) 46.9

6 United Kingdom 43.1

7 European Union (27) 23.0

8 North America 22.4

9 United States 21.4

10 Germany 8.97

11 Upper-middle-income countries 6.82

12 Asia 5.84

13 France 5.47

14 China 3.81

15 Europe (excl. EU-28) 3.79

16 Russia 3.38

17 Asia (excl. China and India) 3.25

18 Lower-middle-income countries 2.34

19 Belgium 2.32

20 Poland 1.99

> print(paste(rank\_india))

[1] "77.5"

> print(bot\_20\_per\_capita)

# A tibble: 20 × 2

Entity Avg\_per\_cap

*<chr>* *<dbl>*

1 Guinea-Bissau 0.130

2 Cote d'Ivoire 0.124

3 Tanzania 0.119

4 Nepal 0.102

5 Madagascar 0.0977

6 Mali 0.0919

7 Malawi 0.0890

8 South Sudan 0.0886

9 Democratic Republic of Congo 0.0796

10 Burkina Faso 0.0753

11 Uganda 0.0716

12 Somalia 0.0657

13 Niger 0.0641

14 Chad 0.0626

15 Guinea 0.0568

16 Central African Republic 0.0558

17 Rwanda 0.0552

18 Ethiopia 0.0538

19 Sierra Leone 0.0417

20 Burundi 0.0292

print(bot\_20\_cum)

# A tibble: 20 × 2

Entity Avg\_Cum

*<chr>* *<dbl>*

1 Saint Pierre and Miquelon 0.000184

2 Micronesia (country) 0.000179

3 Turks and Caicos Islands 0.000172

4 Saint Vincent and the Grenadines 0.000170

5 British Virgin Islands 0.000142

6 Comoros 0.000141

7 Tonga 0.000125

8 Dominica 0.000124

9 Marshall Islands 0.000121

10 Anguilla 0.000100

11 Sao Tome and Principe 0.0000959

12 Bhutan 0.0000878

13 Andorra 0.0000858

14 Cook Islands 0.0000813

15 Kiribati 0.0000790

16 Montserrat 0.0000578

17 Wallis and Futuna 0.0000285

18 Saint Helena 0.0000139

19 Niue 0.0000114

20 Tuvalu 0.00000138

Conclusion 1: US is 2nd not first (UK is the highest),

China is a little further behind in 5th, w/ several western 1st world countries leading the pack

India is at about the 1/3 mark of all countries emitting, well below the top 10 as I expected.)

The least emitters are small island nations, some of which are very touristy

When accounting cumulative, wealthy small nations make up most of the emissions,

and 3rd world countries have the least per capita, most of which were also in Africa

Conclusion 2: Most of the 1st world lead emitters have reduced their share over time, despite still being the lead

In share they have been in a long downward trend, in per capita it has been more recent

China (and India) have both been increasing their share and per capita previous to the current decade

The least emitters are increasing their share of emissions

The lowest emitters have a very noisy emissions per capita, and over the next few decades a stronger trend may emerge

The gap between the highest and lowest emitters is shrinking (although still vast)