

Tidyverse Exercise

Kerui Cao

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How many continents are included in the data set?

So the numbers of countries is 5.

How many countrys are included? How many countries per continent?

There are 142 contries included. So 28.4 contries per continents. More specific and accurate infomation is listed below"

Table 1: Number of countries included for each cintinents

continent	Num_of_contries
Oceania	2
Americas	25
Europe	30
Asia	33
Africa	52

Using the gapminder data, produce a report showing the continents in the dataset, total population per continent, and GDP per capita. Be sure that the table is properly labeled and suitable for inclusion in a printed report.

Table 2: Total GDP for each continents 1952-1967

1952		1957		1962		1967	
continent	tol_GDP	continent	tol_GDP	continent	tol_GDP	continent	tol_GDP
Oceania	108.32	Oceania	133.65	Oceania	164.67	Oceania	211.92
Africa	311.61	Africa	382.69	Africa	456.80	Africa	595.08
Asia	1125.14	Asia	1559.85	Asia	1984.50	Asia	2793.40
Europe	2549.16	Europe	3299.68	Europe	4169.53	Europe	5200.99
Americas	2943.46	Americas	3520.44	Americas	4228.85	Americas	5446.68

Table 3: Total GDP for each continents 1972-1987

1972		1977		1982		1987	
continent	tol_GDP	continent	tol_GDP	continent	tol_GDP	continent	tol_GDP
Oceania	268.22	Oceania	309.42	Oceania	352.35	Oceania	418.90
Africa	783.73	Africa	972.16	Africa	1146.14	Africa	1253.60
Asia	4104.75	Asia	5273.48	Asia	6416.15	Asia	7978.90
Europe	6560.74	Europe	7661.01	Europe	8384.51	Europe	9495.23
Americas	6703.97	Americas	8102.13	Americas	9082.87	Americas	10986.20

Table 4: Total GDP for each continents 1992-2007

1992		1997		2002		2007	
continent	tol_GDP	continent	tol_GDP	continent	tol_GDP	continent	tol_GDP
Oceania	472.64	Oceania	578.61	Oceania	690.48	Oceania	807.32
Africa	1365.36	Africa	1561.22	Africa	1835.83	Africa	2380.48
Asia	10134.33	Europe	11508.23	Europe	13093.49	Europe	14795.49
Europe	10281.08	Asia	12790.74	Asia	15115.40	Americas	19418.05
Americas	12247.48	Americas	14567.35	Americas	16531.22	Asia	20707.94

Produce a well-labeled table that summarizes GDP per capita for the countries in each continent, contrasting the years 1952 and 2007.

Table 5: Summary for GDP per Capita in 1952

continent	Ave_GDP_Capita	Max_GDP_Capita	Min_GDP_Capita	var_GDP_Capita
Africa	1252.572	4725.296	298.8462	966194.9
Americas	4079.063	13990.482	1397.7171	9010368.1
Asia	5195.484	108382.353	331.0000	347259157.6
Europe	5661.057	14734.233	973.5332	9697372.8
Oceania	10298.086	10556.576	10039.5956	133634.2

Table 6: Summary for GDP per Capita in 2007

continent	Ave_GDP_Capita	Max_GDP_Capita	Min_GDP_Capita	var_GDP_Capita
Africa	3089.033	13206.48	277.5519	13091107
Americas	11003.032	42951.65	1201.6372	94346435
Asia	12473.027	47306.99	944.0000	200362251
Europe	25054.482	49357.19	5937.0295	139248020
Oceania	29810.188	34435.37	25185.0091	42784565

Product a plot that summarizes the same data as the table. There should be two plots per continent.

[1] "To be asked"

Which countries in the dataset have had periods of negative population growth?

Table 7: Countries had periods of negative population growth

Afghanistan	Guinea-Bissau	Liberia	Serbia
Cambodia	Hungary	Montenegro	Somalia
Croatia	Kuwait	Portugal	South Africa
Czech Republic	Lebanon	Romania	Switzerland
Equatorial Guinea	Lesotho	Rwanda	West Bank and Gaza