

```
1 C:\Users\Petro\PycharmProjects\homework2\venv\Scripts
  \python.exe C:/Users/Petro/PycharmProjects/homework2/
  pandas_task.py
```

```
2 Answer One:
```

```
3 Rank Documents Citable
  documents Citations \
4 Country
```

5	China	1	303064
	301778 3036531		
6	United States	2	184851
	181106 2623922		
7	India	3	60257
	58589 590570		
8	Japan	4	52780
	52281 557023		
9	United Kingdom	5	47141
	45928 748994		
10	Germany	6	42343
	41464 528645		
11	Russian Federation	7	39424
	39189 142937		
12	Canada	8	35588
	34940 665415		
13	Italy	9	31260
	29959 433388		
14	South Korea	10	31200
	30949 405923		
15	France	11	26848
	26320 403834		
16	Iran	12	25481
	25204 398571		
17	Spain	13	24969
	24505 427391		
18	Brazil	14	23110
	22762 219895		
19	Australia	15	22803
	22276 396186		

```
20
```

```
21 Self-citations Citations per
```

21	document	H index	\	
22	Country			
23	China			2092737
	10.02	273		
24	United States			819242
	14.19	389		
25	India			213760
			9.80	198
26	Japan			132113
	10.55	203		
27	United Kingdom			132737
	15.89	244		
28	Germany			115432
	12.48	211		
29	Russian Federation			67935
			3.63	96
30	Canada			113363
	18.70	246		
31	Italy			105641
	13.86	177		
32	South Korea			74753
	13.01	169		
33	France			73792
	15.04	190		
34	Iran			122647
	15.64	159		
35	Spain			77583
	17.12	187		
36	Brazil			53635
			9.52	139
37	Australia			62694
	17.37	192		
38				
39			Energy Supply	Energy Supply per
	Capita	% Renewable	\	
40	Country			
41	China			1.271910e+11

41		93.0	19.754910	
42	United States	9.083800e+10		
		286.0	11.570980	
43	India	3.319500e+10		
		26.0	14.969080	
44	Japan	1.898400e+10		
		149.0	10.232820	
45	United Kingdom	7.920000e+09		
		124.0	10.600470	
46	Germany	1.326100e+10		
		165.0	17.901530	
47	Russian Federation	3.070900e+10		
		214.0	17.288680	
48	Canada	1.043100e+10		
		296.0	61.945430	
49	Italy	6.530000e+09		
		109.0	33.667230	
50	South Korea	6.120000e+08		
		25.0	70.180290	
51	France	1.059700e+10		
		166.0	17.020280	
52	Iran	9.172000e+09		
		119.0	5.707721	
53	Spain	4.923000e+09		
		106.0	37.968590	
54	Brazil	1.214900e+10		
		59.0	69.648030	
55	Australia	5.386000e+09		
		231.0	11.810810	
56				
57			2006	2007
	2008	2009	\	
58	Country			
59	China	2.752132e+12	3.550343e+12	4.594307e+12
		5.101703e+12		
60	United States	1.381559e+13	1.447423e+13	1.476986e+13
		1.447806e+13		
61	India	9.402599e+11	1.216735e+12	1.198896e+12
		1.341887e+12		

62	Japan	4.601663e+12	4.579751e+12	5.
	106679e+12	5.289493e+12		
63	United Kingdom	2.717060e+12	3.106182e+12	2.
	938882e+12	2.425798e+12		
64	Germany	2.994704e+12	3.425578e+12	3.
	745264e+12	3.411261e+12		
65	Russian Federation	9.899305e+11	1.299706e+12	1.
	660846e+12	1.222644e+12		
66	Canada	1.319265e+12	1.468820e+12	1.
	552990e+12	1.374625e+12		
67	Italy	1.949552e+12	2.213102e+12	2.
	408655e+12	2.199929e+12		
68	South Korea	1.053217e+12	1.172614e+12	1.
	047339e+12	9.439419e+11		
69	France	2.320536e+12	2.660591e+12	2.
	930304e+12	2.700887e+12		
70	Iran	2.662989e+11	3.498816e+11	4.
	123362e+11	4.163970e+11		
71	Spain	1.260399e+12	1.474003e+12	1.
	631863e+12	1.491473e+12		
72	Brazil	1.107627e+12	1.397114e+12	1.
	695855e+12	1.666996e+12		
73	Australia	7.475562e+11	8.539554e+11	1.
	055127e+12	9.280430e+11		
74				
75		2010	2011	
	2012	2013 \		
76	Country			
77	China	6.087164e+12	7.551500e+12	8.
	532230e+12	9.570406e+12		
78	United States	1.504896e+13	1.559973e+13	1.
	625397e+13	1.684319e+13		
79	India	1.675615e+12	1.823050e+12	1.
	827638e+12	1.856722e+12		
80	Japan	5.759072e+12	6.233147e+12	6.
	272363e+12	5.212328e+12		
81	United Kingdom	2.491110e+12	2.674891e+12	2.
	719158e+12	2.803291e+12		
82	Germany	3.399668e+12	3.749315e+12	3.

82	527143e+12	3.733805e+12		
83	Russian Federation	1.524917e+12	2.045926e+12	2.
	208296e+12	2.292473e+12		
84	Canada	1.617343e+12	1.793327e+12	1.
	828366e+12	1.846597e+12		
85	Italy	2.136100e+12	2.294994e+12	2.
	086958e+12	2.141924e+12		
86	South Korea	1.144067e+12	1.253223e+12	1.
	278428e+12	1.370795e+12		
87	France	2.645188e+12	2.865158e+12	2.
	683672e+12	2.811877e+12		
88	Iran	4.868076e+11	6.261331e+11	6.
	440355e+11	4.927756e+11		
89	Spain	1.422108e+12	1.480710e+12	1.
	324744e+12	1.355143e+12		
90	Brazil	2.208838e+12	2.616157e+12	2.
	465228e+12	2.472819e+12		
91	Australia	1.147589e+12	1.397908e+12	1.
	546509e+12	1.576335e+12		
92				
93		2014	2015	
94	Country			
95	China	1.047568e+13	1.106155e+13	
96	United States	1.755068e+13	1.820602e+13	
97	India	2.039127e+12	2.103588e+12	
98	Japan	4.896994e+12	4.444931e+12	
99	United Kingdom	3.087166e+12	2.956574e+12	
100	Germany	3.889093e+12	3.357586e+12	
101	Russian Federation	2.059242e+12	1.363481e+12	
102	Canada	1.805750e+12	1.556509e+12	
103	Italy	2.162010e+12	1.836638e+12	
104	South Korea	1.484318e+12	1.465773e+12	
105	France	2.855964e+12	2.439189e+12	
106	Iran	4.603828e+11	4.082129e+11	
107	Spain	1.371223e+12	1.195600e+12	
108	Brazil	2.456044e+12	1.802212e+12	
109	Australia	1.467505e+12	1.350534e+12	
110	Answer Two:			
111	Country			
112	United States	1.570403e+13		
113	China	6.927702e+12		

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114 Japan 5.239642e+12
115 Germany 3.523342e+12
116 United Kingdom 2.792011e+12
117 France 2.691337e+12
118 Italy 2.142986e+12
119 Brazil 1.988889e+12
120 Russian Federation 1.666746e+12
121 Canada 1.616359e+12
122 India 1.602352e+12
123 Spain 1.400727e+12
124 South Korea 1.221372e+12
125 Australia 1.207106e+12
126 Iran 4.563261e+11
127 Name: Average GDP, dtype: float64
128 Answer Three:
129 118652421857.7998
130 Answer Four:
131 ('China', 0.689186772669207)
132 Answer Five:
133 United States
134 Answer Six:
135 0.28905916159840184
136 Answer Seven:
137
138 Region
139 Asia 5 2.873341e+09 5.746682e+08 6.
841144e+08
140 Australia 1 2.331602e+07 2.331602e+07
NaN
141 Europe 6 4.579297e+08 7.632161e+07 3.
464767e+07
142 North America 2 3.528552e+08 1.764276e+08 1.
996696e+08
143 South America 1 2.059153e+08 2.059153e+08
NaN
144
145 Process finished with exit code 0
146

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