

In [70]:

```
## Qual a média e desvio padrão do consumo de cerveja, licor, vinho e total de álcool? ##
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```
import pandas as pd
df = pd.read_csv('drinks.txt')
df
```

Out[70]:

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
0	Afghanistan	0	0	0	0.0
1	Albania	89	132	54	4.9
2	Algeria	25	0	14	0.7
3	Andorra	245	138	312	12.4
4	Angola	217	57	45	5.9
...
188	Venezuela	333	100	3	7.7
189	Vietnam	111	2	1	2.0
190	Yemen	6	0	0	0.1
191	Zambia	32	19	4	2.5
192	Zimbabwe	64	18	4	4.7

193 rows × 5 columns

In [71]:

```
media=[df ['beer_servings'].mean(),
         df ['spirit_servings'].mean(),
         df ['wine_servings'].mean(),
         df ['total_litres_of_pure_alcohol'].mean()]

desvio_padrao=[df ['beer_servings'].std(),
                df ['spirit_servings'].std(),
                df ['wine_servings'].std(),
                df ['total_litres_of_pure_alcohol'].std()]
```

In [72]:

media

Out[72]:

```
[106.16062176165804, 80.99481865284974, 49.45077720207254, 4.717098445595855]
```

In [73]:

desvio_padrao

Out[73]:

[101.14310253931335, 88.2843121096862, 79.69759845763012, 3.773298164356083]

In [160]:

Qual o consumo de licor na França?

In [150]:

df[df['country']=='France']

Out[150]:

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
61	France	127	151	370	11.8

In [162]:

```
france_spirit = df[df['country']=='France']
france_spirit[['country','spirit_servings']]
```

Out[162]:

	country	spirit_servings
61	France	151

In [178]:

```
## Quais os 5 países nos quais se consome mais vinho? ##
df.sort_values(by = 'wine_servings',ascending = False).head(5)
```

Out[178]:

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
61	France	127	151	370	11.8
136	Portugal	194	67	339	11.0
3	Andorra	245	138	312	12.4
166	Switzerland	185	100	280	10.2
48	Denmark	224	81	278	10.4

In [129]:

Quais os países nos quais o consumo de cerveja está acima da média?

In [156]:

```

cerveja=df[df['beer_servings']>=media[0]]
display(cerveja)

```

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
3	Andorra	245	138	312	12.4
4	Angola	217	57	45	5.9
6	Argentina	193	25	221	8.3
8	Australia	261	72	212	10.4
9	Austria	279	75	191	9.7
...
182	United Kingdom	219	126	195	10.4
184	USA	249	158	84	8.7
185	Uruguay	115	35	220	6.6
188	Venezuela	333	100	3	7.7
189	Vietnam	111	2	1	2.0

76 rows × 5 columns

In [157]:

```

cerveja[['country','beer_servings']]

```

Out[157]:

	country	beer_servings
3	Andorra	245
4	Angola	217
6	Argentina	193
8	Australia	261
9	Austria	279
...
182	United Kingdom	219
184	USA	249
185	Uruguay	115
188	Venezuela	333
189	Vietnam	111

76 rows × 2 columns

In [163]:

```
## Quais países nos quais o consumo total de álcool está acima do Brasil, em ordem do menor
```

In [176]:

```
df[df['country']=='Brazil']
```

Out[176]:

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
23	Brazil	245	145	16	7.2

In [169]:

```
brazil_alcool = df[df['country']=='Brazil']  
brazil_alcool [['country', 'total_litres_of_pure_alcohol']]
```

Out[169]:

	country	total_litres_of_pure_alcohol
23	Brazil	7.2

In [236]:

valor= 7.2

```
lista_br=df[df['total_litres_of_pure_alcohol']>=valor].sort_values(by='total_litres_of_pure_alcohol')
lista_br
```

Out[236]:

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
165	Sweden	152	60	186	7.2
23	Brazil	245	145	16	7.2
130	Panama	285	104	18	7.2
132	Paraguay	213	117	74	7.3
35	Chile	130	124	172	7.6
188	Venezuela	333	100	3	7.7
143	St. Kitts & Nevis	194	205	32	7.7
159	South Africa	225	76	81	8.2
32	Canada	240	122	100	8.2
44	Cyprus	192	154	113	8.2
6	Argentina	193	25	221	8.3
179	Uganda	45	9	0	8.3
67	Greece	133	112	218	8.3
184	USA	249	158	84	8.7
62	Gabon	347	98	59	8.9
180	Ukraine	206	237	45	8.9
124	Nigeria	42	5	2	9.1
121	New Zealand	203	79	175	9.3
120	Netherlands	251	88	190	9.4
57	Estonia	224	194	59	9.5
151	Serbia	283	131	127	9.6
9	Austria	279	75	191	9.7
138	South Korea	140	16	9	9.8
160	Spain	284	157	112	10.0
60	Finland	263	133	97	10.0
144	St. Lucia	171	315	71	10.1
166	Switzerland	185	100	280	10.2
42	Croatia	230	87	254	10.2
25	Bulgaria	231	252	94	10.3
182	United Kingdom	219	126	195	10.4
8	Australia	261	72	212	10.4
48	Denmark	224	81	278	10.4

	country	beer_servings	spirit_servings	wine_servings	total_litres_of_pure_alcohol
140	Romania	297	122	167	10.4
16	Belgium	295	84	212	10.5
93	Latvia	281	216	62	10.5
156	Slovenia	270	51	276	10.6
135	Poland	343	215	56	10.9
136	Portugal	194	67	339	11.0
75	Hungary	234	215	185	11.3
65	Germany	346	117	175	11.3
99	Luxembourg	236	133	271	11.4
155	Slovakia	196	293	116	11.4
81	Ireland	313	118	165	11.4
141	Russian Federation	247	326	73	11.5
45	Czech Republic	361	170	134	11.8
61	France	127	151	370	11.8
68	Grenada	199	438	28	11.9
3	Andorra	245	138	312	12.4
98	Lithuania	343	244	56	12.9
15	Belarus	142	373	42	14.4