

relatorio_data_500_analise

February 14, 2023

```
[ ]: import pandas as pd
import seaborn as srn
import numpy as np
from matplotlib import pyplot as plt
import statistics
```

```
[ ]: data = pd.read_excel('C:
↪\\Users\\Riallen\\Documents\\Print_de_telas\\data1\\data_geral.xlsx')
data.head()
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour
0 3.54 597 03:55:45 2023-02-13 3
1 1.19 598 03:55:58 2023-02-13 3
2 2.58 535 03:56:20 2023-02-13 3
3 1.00 696 03:56:30 2023-02-13 3
4 2.60 648 03:56:53 2023-02-13 3
```

```
[ ]: data['Odds'].describe()
```

```
[ ]: count    501.000000
mean         9.654990
std          46.210931
min           1.000000
25%           1.350000
50%           2.080000
75%           4.140000
max          810.900000
Name: Odds, dtype: float64
```

```
[ ]: data['Qt_Apostadores'].describe()
```

```
[ ]: count    501.000000
mean    1291.864271
std     532.288532
min     114.000000
25%     782.000000
50%    1305.000000
75%    1692.000000
```

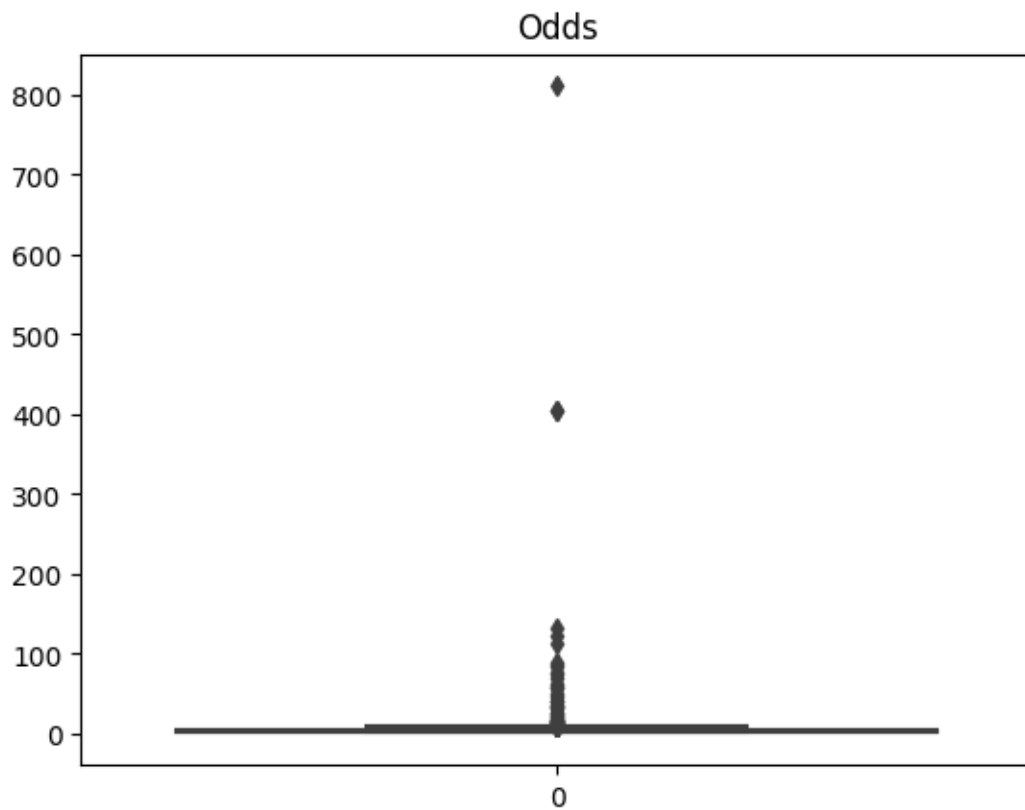
```
max      2626.000000
Name: Qt_Apostadores, dtype: float64
```

```
[ ]: data['hour'].describe()
```

```
[ ]: count      501.000000
      mean       5.165669
      std       1.074476
      min       3.000000
      25%       4.000000
      50%       5.000000
      75%       6.000000
      max       7.000000
      Name: hour, dtype: float64
```

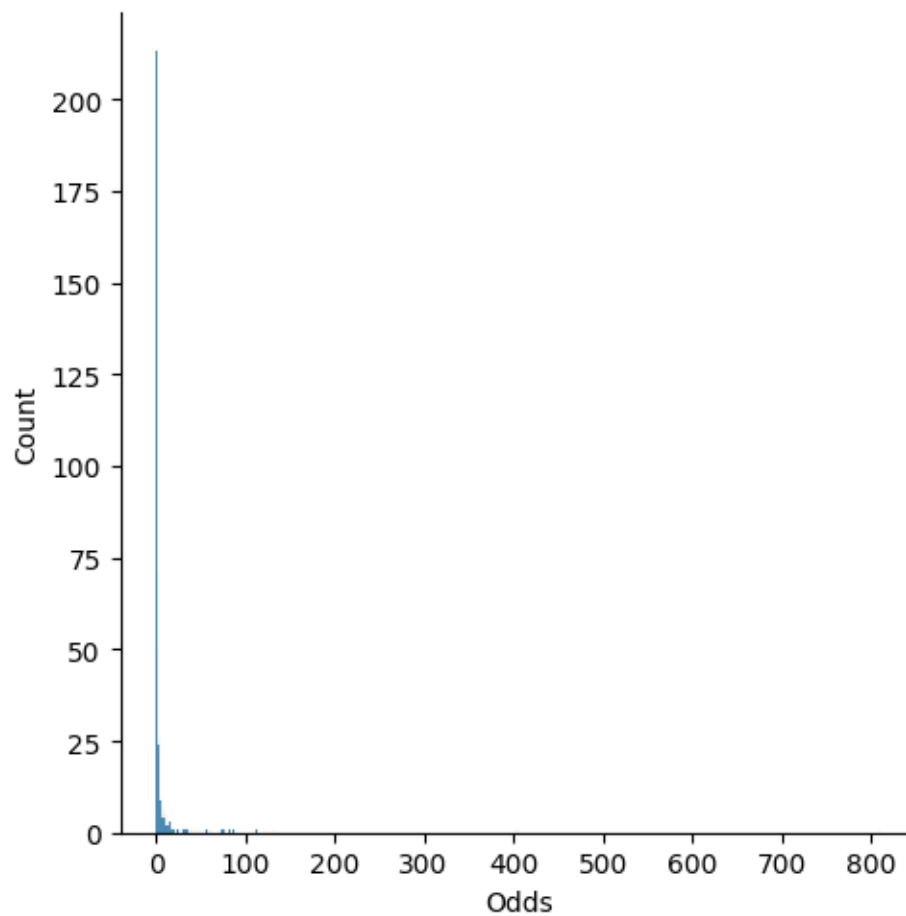
```
[ ]: srn.boxplot(data['Odds']).set_title('Odds')
```

```
[ ]: Text(0.5, 1.0, 'Odds')
```



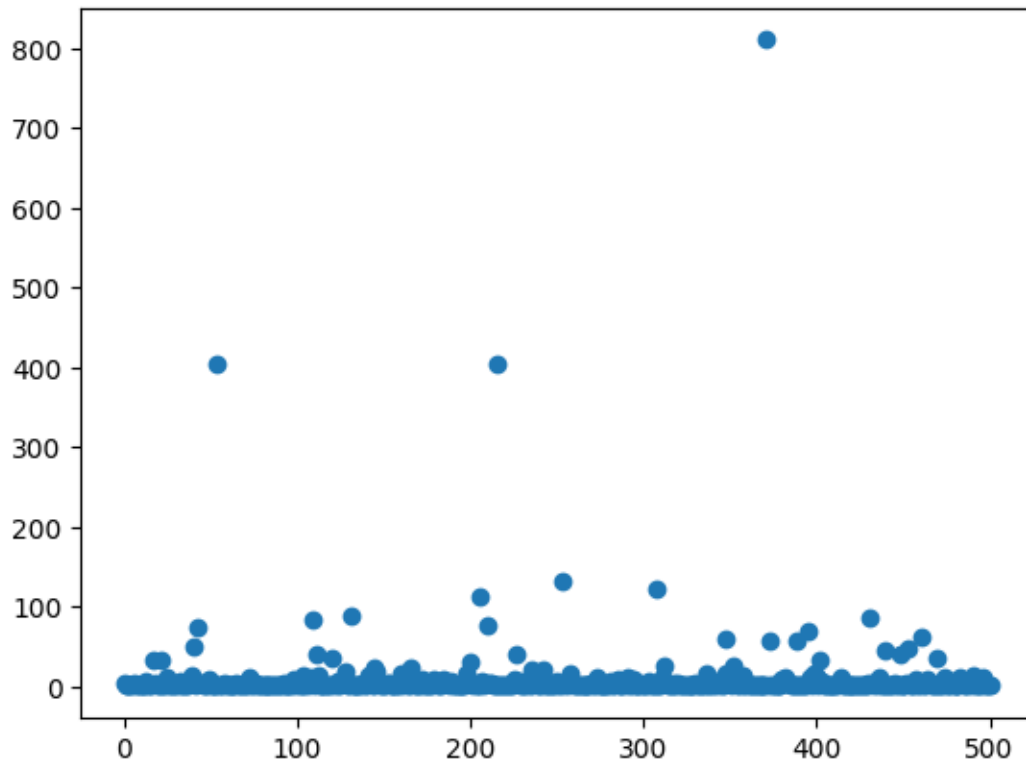
```
[ ]: srn.displot(data['Odds'])
```

```
[ ]: <seaborn.axisgrid.FacetGrid at 0x1fff5dd6b60>
```



```
[ ]: x = np.array(range(0,501,1))  
     y = np.array(data['Odds'])  
     plt.scatter(x,y)
```

```
[ ]: <matplotlib.collections.PathCollection at 0x1fff988df60>
```



```
[ ]: moda = statistics.mode(y)
      moda
```

```
[ ]: 1.0
```

```
[ ]: data['Odds'].value_counts()
```

```
[ ]: 1.00      18
      1.20       8
      1.13       7
      1.11       6
      1.36       5
      ..
      31.10      1
      1.52       1
      3.36       1
      7.07       1
      1.65       1
      Name: Odds, Length: 301, dtype: int64
```

```
[ ]: data[data["Odds"] == 1.00]
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour
3 1.0 696 03:56:30 2023-02-13 3
7 1.0 528 03:57:44 2023-02-13 3
10 1.0 514 03:58:24 2023-02-13 3
19 1.0 566 04:02:06 2023-02-13 4
67 1.0 776 04:21:27 2023-02-13 4
101 1.0 580 04:32:59 2023-02-13 4
107 1.0 607 04:35:02 2023-02-13 4
213 1.0 1514 05:22:29 2023-02-13 5
217 1.0 1336 05:24:48 2023-02-13 5
263 1.0 2035 05:46:16 2023-02-13 5
271 1.0 1588 05:48:45 2023-02-13 5
279 1.0 1496 05:51:24 2023-02-13 5
287 1.0 1177 05:54:49 2023-02-13 5
300 1.0 1608 05:59:40 2023-02-13 5
393 1.0 1734 06:39:13 2023-02-13 6
401 1.0 2003 06:43:51 2023-02-13 6
406 1.0 1950 06:46:05 2023-02-13 6
437 1.0 1954 06:58:28 2023-02-13 6
```

```
[ ]: data[data["Odds"] <= 1.61]
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour
1 1.19 598 03:55:58 2023-02-13 3
3 1.00 696 03:56:30 2023-02-13 3
5 1.17 543 03:57:06 2023-02-13 3
7 1.00 528 03:57:44 2023-02-13 3
8 1.26 660 03:57:56 2023-02-13 3
.. ...
493 1.20 1499 07:23:32 2023-02-13 7
494 1.40 1410 07:23:48 2023-02-13 7
497 1.32 2626 07:25:10 2023-02-13 7
498 1.22 1942 07:25:24 2023-02-13 7
499 1.08 1844 07:25:42 2023-02-13 7
```

[196 rows x 5 columns]

```
[ ]: data[data["Odds"] <= 1.45]
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour
1 1.19 598 03:55:58 2023-02-13 3
3 1.00 696 03:56:30 2023-02-13 3
5 1.17 543 03:57:06 2023-02-13 3
7 1.00 528 03:57:44 2023-02-13 3
8 1.26 660 03:57:56 2023-02-13 3
.. ...
493 1.20 1499 07:23:32 2023-02-13 7
```

494	1.40	1410	07:23:48	2023-02-13	7
497	1.32	2626	07:25:10	2023-02-13	7
498	1.22	1942	07:25:24	2023-02-13	7
499	1.08	1844	07:25:42	2023-02-13	7

[159 rows x 5 columns]

```
[ ]: data[data["Odds"] <= 1.30]
```

```
[ ]:      Odds  Qt_Apostadores  Hora_Aposta  Data_Hora_Aposta  hour
1      1.19           598    03:55:58    2023-02-13      3
3      1.00           696    03:56:30    2023-02-13      3
5      1.17           543    03:57:06    2023-02-13      3
7      1.00           528    03:57:44    2023-02-13      3
8      1.26           660    03:57:56    2023-02-13      3
..      ...           ...           ...           ...
476    1.25          2335    07:15:46    2023-02-13      7
492    1.13          2305    07:23:18    2023-02-13      7
493    1.20          1499    07:23:32    2023-02-13      7
498    1.22          1942    07:25:24    2023-02-13      7
499    1.08          1844    07:25:42    2023-02-13      7
```

[115 rows x 5 columns]

```
[ ]: data[data["Odds"] >= 2.5]
```

```
[ ]:      Odds  Qt_Apostadores  Hora_Aposta  Data_Hora_Aposta  hour
0      3.54           597    03:55:45    2023-02-13      3
2      2.58           535    03:56:20    2023-02-13      3
4      2.60           648    03:56:53    2023-02-13      3
6      3.93           675    03:57:33    2023-02-13      3
11     2.86           468    03:58:47    2023-02-13      3
..      ...           ...           ...           ...
488    5.98          2214    07:21:17    2023-02-13      7
490   13.60          2234    07:22:26    2023-02-13      7
491    8.27          2154    07:23:04    2023-02-13      7
495    2.51          1624    07:24:11    2023-02-13      7
496   12.47          2557    07:24:55    2023-02-13      7
```

[206 rows x 5 columns]

```
[ ]: data[data["Odds"] >= 3.83]
```

```
[ ]:      Odds  Qt_Apostadores  Hora_Aposta  Data_Hora_Aposta  hour
6      3.93           675    03:57:33    2023-02-13      3
13     7.18           462    03:59:34    2023-02-13      3
17    33.12           479    04:01:29    2023-02-13      4
```

22	34.17	464	04:03:30	2023-02-13	4
25	12.65	437	04:04:34	2023-02-13	4
..
484	8.04	2469	07:19:34	2023-02-13	7
488	5.98	2214	07:21:17	2023-02-13	7
490	13.60	2234	07:22:26	2023-02-13	7
491	8.27	2154	07:23:04	2023-02-13	7
496	12.47	2557	07:24:55	2023-02-13	7

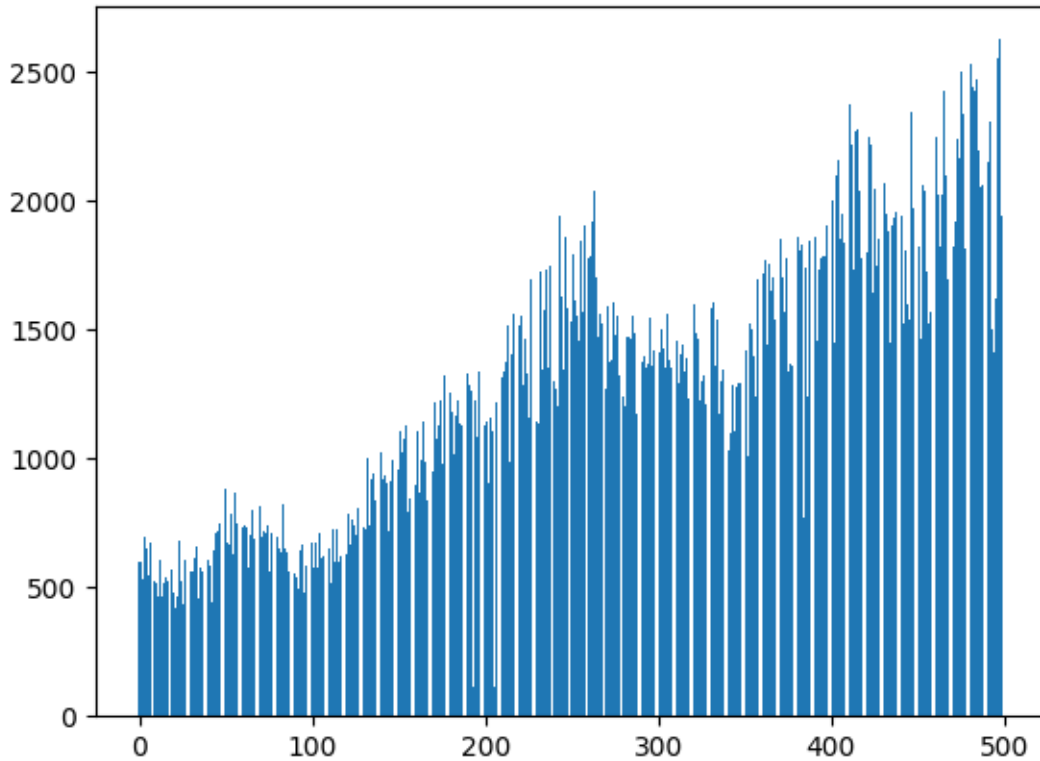
[142 rows x 5 columns]

```
[ ]: data['Qt_Apostadores'].describe()
```

```
[ ]: count      501.000000
      mean      1291.864271
      std       532.288532
      min       114.000000
      25%       782.000000
      50%      1305.000000
      75%      1692.000000
      max      2626.000000
      Name: Qt_Apostadores, dtype: float64
```

```
[ ]: x = np.array(range(0,501,1))
      y = np.array(data['Qt_Apostadores'])
      plt.bar(x,y)
```

```
[ ]: <BarContainer object of 501 artists>
```



```
[ ]: i = 0
t = len(data['Hora_Aposta'])
#print(t)
segundo = []
minuto = []
for j in range(0,t):
    #print(data['Hora_Aposta'][j])
    #print(data['Hora_Aposta'][j].split(":"))
    x = data['Hora_Aposta'][j].split(":")
    segundo.append(float(x[2]))
    minuto.append(float(x[1]))

for j in range(0,t):
    segundo[j] = segundo[j]/60
    minuto[j] = minuto[j] + round(segundo[j],6)

for j in range(0,t):
    minuto[j] = round(minuto[j]/60, 6)

data['hour_edi'] = data['hour']
for j in range(0,t):
    data['hour_edi'][j] = data['hour_edi'][j] + minuto[j]
```



```
data['hour_edi']
```

C:\Users\Riallen\AppData\Local\Temp\ipykernel_9672\1362838707.py:22:

SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy

```
data['hour_edi'][j] = data['hour_edi'][j] + minuto[j]
```

```
[ ]: 0      3.929167
      1      3.932778
      2      3.938889
      3      3.941667
      4      3.948056
      ...
      496    7.415278
      497    7.419444
      498    7.423333
      499    7.428333
      500    7.433056
      Name: hour_edi, Length: 501, dtype: float64
```

```
[ ]: data['hour_edi'].describe()
```

```
[ ]: count      501.000000
      mean        5.643326
      std         1.028820
      min         3.929167
      25%         4.722222
      50%         5.647778
      75%         6.531389
      max         7.433056
      Name: hour_edi, dtype: float64
```

```
[ ]: data['hour']
```

```
[ ]: 0      3
      1      3
      2      3
      3      3
      4      3
      ..
      496    7
      497    7
      498    7
      499    7
```

```
500      7
Name: hour, Length: 501, dtype: int64
```

```
[ ]: data_hora_145 = data[data['Odds']> 1.45]
data_hora_145
```

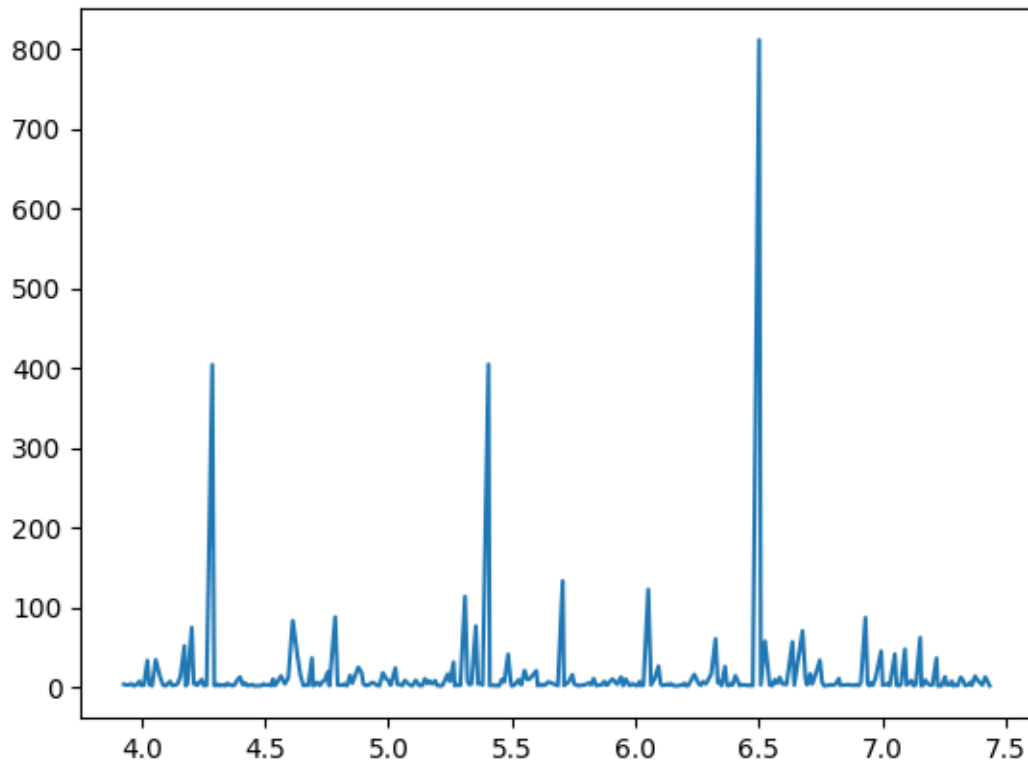
```
[ ]:      Odds  Qt_Apostadores Hora_Aposta Data_Hora_Aposta  hour  hour_ed
0      3.54      597      03:55:45      2023-02-13      3  3.929167
2      2.58      535      03:56:20      2023-02-13      3  3.938889
4      2.60      648      03:56:53      2023-02-13      3  3.948056
6      3.93      675      03:57:33      2023-02-13      3  3.959167
9      1.46      524      03:58:12      2023-02-13      3  3.970000
..      ...      ...      ...      ...      ...
490    13.60     2234      07:22:26      2023-02-13      7  7.373889
491     8.27     2154      07:23:04      2023-02-13      7  7.384444
495     2.51     1624      07:24:11      2023-02-13      7  7.403056
496    12.47     2557      07:24:55      2023-02-13      7  7.415278
500     1.65     2034      07:25:59      2023-02-13      7  7.433056
```

```
[342 rows x 6 columns]
```

```
[ ]: x = np.array(data_hora_145['hour_ed'])
y = np.array(data_hora_145['Odds'])

plt.plot(x,y)
```

```
[ ]: [ <matplotlib.lines.Line2D at 0x1ffffcc06560>]
```



```
[ ]: data_hora3 = data[data['hour'] == 3]
      data_hora3
```

```
[ ]:      Odds  Qt_Apostadores  Hora_Aposta  Data_Hora_Aposta  hour  hour_edi
0      3.54          597      03:55:45      2023-02-13      3  3.929167
1      1.19          598      03:55:58      2023-02-13      3  3.932778
2      2.58          535      03:56:20      2023-02-13      3  3.938889
3      1.00          696      03:56:30      2023-02-13      3  3.941667
4      2.60          648      03:56:53      2023-02-13      3  3.948056
5      1.17          543      03:57:06      2023-02-13      3  3.951667
6      3.93          675      03:57:33      2023-02-13      3  3.959167
7      1.00          528      03:57:44      2023-02-13      3  3.962222
8      1.26          660      03:57:56      2023-02-13      3  3.965556
9      1.46          524      03:58:12      2023-02-13      3  3.970000
10     1.00          514      03:58:24      2023-02-13      3  3.973333
11     2.86          468      03:58:47      2023-02-13      3  3.979722
12     1.08          610      03:58:59      2023-02-13      3  3.983056
13     7.18          462      03:59:34      2023-02-13      3  3.992778
14     2.08          520      03:59:54      2023-02-13      3  3.998333
```

```
[ ]: data_hora3[data_hora3['Odds'] >= 1.45]
      #print(len(data_hora3[data_hora3['Odds'] >= 1.45]))
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour hour_edt
0 3.54 597 03:55:45 2023-02-13 3 3.929167
2 2.58 535 03:56:20 2023-02-13 3 3.938889
4 2.60 648 03:56:53 2023-02-13 3 3.948056
6 3.93 675 03:57:33 2023-02-13 3 3.959167
9 1.46 524 03:58:12 2023-02-13 3 3.970000
11 2.86 468 03:58:47 2023-02-13 3 3.979722
13 7.18 462 03:59:34 2023-02-13 3 3.992778
14 2.08 520 03:59:54 2023-02-13 3 3.998333
```

```
[ ]: #Proporção de ods acima de 1.45
p_1453 = len(data_hora3[data_hora3['Odds'] >= 1.45])/len(data_hora3['Odds'])
p_1453
```

```
[ ]: 0.5333333333333333
```

```
[ ]: data_hora4 = data[data['hour'] == 4]
data_hora4
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour hour_edt
15 2.46 536 04:00:16 2023-02-13 4 4.004444
16 2.15 524 04:00:36 2023-02-13 4 4.010000
17 33.12 479 04:01:29 2023-02-13 4 4.024722
18 3.53 602 04:01:55 2023-02-13 4 4.031944
19 1.00 566 04:02:06 2023-02-13 4 4.035000
.. ...
158 1.45 1180 04:57:31 2023-02-13 4 4.958611
159 1.57 947 04:57:49 2023-02-13 4 4.963611
160 17.74 897 04:58:39 2023-02-13 4 4.977500
161 1.38 1104 04:58:54 2023-02-13 4 4.981667
162 9.41 870 04:59:34 2023-02-13 4 4.992778
```

[148 rows x 6 columns]

```
[ ]: data_hora4[data_hora4['Odds'] >= 1.45]
```

```
[ ]: Odds Qt_Apostadores Hora_Aposta Data_Hora_Aposta hour hour_edt
15 2.46 536 04:00:16 2023-02-13 4 4.004444
16 2.15 524 04:00:36 2023-02-13 4 4.010000
17 33.12 479 04:01:29 2023-02-13 4 4.024722
18 3.53 602 04:01:55 2023-02-13 4 4.031944
21 1.60 418 04:02:37 2023-02-13 4 4.043611
.. ...
157 2.11 793 04:57:15 2023-02-13 4 4.954167
158 1.45 1180 04:57:31 2023-02-13 4 4.958611
159 1.57 947 04:57:49 2023-02-13 4 4.963611
160 17.74 897 04:58:39 2023-02-13 4 4.977500
162 9.41 870 04:59:34 2023-02-13 4 4.992778
```

[101 rows x 6 columns]

```
[ ]: #Proporção de ods acima de 1.45
p_1454 = len(data_hora4[data_hora4['Odds'] >= 1.45])/len(data_hora4['Odds'])
p_1454
```

```
[ ]: 0.6824324324324325
```

```
[ ]: data_hora5 = data[data['hour'] == 5]
data_hora5
```

```
[ ]:
```

	Odds	Qt_Apostadores	Hora_Aposta	Data_Hora_Aposta	hour	hour edi
163	7.42	997	05:00:09	2023-02-13	5	5.002500
164	2.29	1143	05:00:31	2023-02-13	5	5.008611
165	1.37	987	05:00:51	2023-02-13	5	5.014167
166	23.79	834	05:01:41	2023-02-13	5	5.028056
167	3.50	1115	05:02:09	2023-02-13	5	5.035833
..
296	2.92	1363	05:58:23	2023-02-13	5	5.973056
297	1.85	1420	05:58:41	2023-02-13	5	5.978056
298	4.05	1658	05:59:10	2023-02-13	5	5.986111
299	1.23	1343	05:59:28	2023-02-13	5	5.991111
300	1.00	1608	05:59:40	2023-02-13	5	5.994444

[138 rows x 6 columns]

```
[ ]: data_hora5[data_hora5['Odds'] >= 1.35]
```

```
[ ]:
```

	Odds	Qt_Apostadores	Hora_Aposta	Data_Hora_Aposta	hour	hour edi
163	7.42	997	05:00:09	2023-02-13	5	5.002500
164	2.29	1143	05:00:31	2023-02-13	5	5.008611
165	1.37	987	05:00:51	2023-02-13	5	5.014167
166	23.79	834	05:01:41	2023-02-13	5	5.028056
167	3.50	1115	05:02:09	2023-02-13	5	5.035833
..
294	9.86	1366	05:57:38	2023-02-13	5	5.960556
295	1.38	1543	05:57:57	2023-02-13	5	5.965833
296	2.92	1363	05:58:23	2023-02-13	5	5.973056
297	1.85	1420	05:58:41	2023-02-13	5	5.978056
298	4.05	1658	05:59:10	2023-02-13	5	5.986111

[107 rows x 6 columns]

```
[ ]: #Proporção de ods acima de 1.45
p_1455 = len(data_hora5[data_hora5['Odds'] >= 1.35])/len(data_hora5['Odds'])
p_1455
```

```
[ ]: 0.7753623188405797
```

```
[ ]: data_hora6 = data[data['hour'] == 6]
data_hora6
```

```
[ ]:      Odds  Qt_Apostadores Hora_Aposta Data_Hora_Aposta  hour  hour_ed
301   2.30         1413    06:00:01    2023-02-13      6  6.000278
302   1.55         1498    06:00:19    2023-02-13      6  6.005278
303   6.67         1428    06:00:59    2023-02-13      6  6.016389
304   1.60         1352    06:01:19    2023-02-13      6  6.021944
305   1.13         1564    06:01:32    2023-02-13      6  6.025556
..    ...         ...         ...         ...         ...
435   2.13         1908    06:57:34    2023-02-13      6  6.959444
436  10.81         1933    06:58:15    2023-02-13      6  6.970833
437   1.00         1954    06:58:28    2023-02-13      6  6.974444
438   1.06         1644    06:58:40    2023-02-13      6  6.977778
439  44.90         1398    06:59:38    2023-02-13      6  6.993889
```

[139 rows x 6 columns]

```
[ ]: data_hora6[data_hora6['Odds'] >= 1.45]
```

```
[ ]:      Odds  Qt_Apostadores Hora_Aposta Data_Hora_Aposta  hour  hour_ed
301   2.30         1413    06:00:01    2023-02-13      6  6.000278
302   1.55         1498    06:00:19    2023-02-13      6  6.005278
303   6.67         1428    06:00:59    2023-02-13      6  6.016389
304   1.60         1352    06:01:19    2023-02-13      6  6.021944
306   2.53         1383    06:01:55    2023-02-13      6  6.031944
..    ...         ...         ...         ...         ...
433   1.68         1879    06:56:40    2023-02-13      6  6.944444
434   5.42         1447    06:57:12    2023-02-13      6  6.953333
435   2.13         1908    06:57:34    2023-02-13      6  6.959444
436  10.81         1933    06:58:15    2023-02-13      6  6.970833
439  44.90         1398    06:59:38    2023-02-13      6  6.993889
```

[96 rows x 6 columns]

```
[ ]: #Proporção de ods acima de 1.45
p_1456 = len(data_hora6[data_hora6['Odds'] >= 1.45])/len(data_hora6['Odds'])
p_1456
```

```
[ ]: 0.6906474820143885
```

```
[ ]: data_hora7 = data[data['hour'] == 7]
data_hora7
```

```
[ ]:      Odds  Qt_Apostadores Hora_Aposta Data_Hora_Aposta  hour  hour_ed
440   2.32         2194    07:00:00    2023-02-13      7  7.000000
```

441	1.16	1939	07:00:13	2023-02-13	7	7.003611
442	1.13	1522	07:00:26	2023-02-13	7	7.007222
443	1.03	1809	07:00:38	2023-02-13	7	7.010556
444	1.07	1596	07:00:51	2023-02-13	7	7.014167
..
496	12.47	2557	07:24:55	2023-02-13	7	7.415278
497	1.32	2626	07:25:10	2023-02-13	7	7.419444
498	1.22	1942	07:25:24	2023-02-13	7	7.423333
499	1.08	1844	07:25:42	2023-02-13	7	7.428333
500	1.65	2034	07:25:59	2023-02-13	7	7.433056

[61 rows x 6 columns]

```
[ ]: data_hora7[data_hora7['Odds']>=1.45]
```

[]:	Odds	Qt_Apostadores	Hora_Aposta	Data_Hora_Aposta	hour	hour_ed
440	2.32	2194	07:00:00	2023-02-13	7	7.000000
445	4.33	1538	07:01:24	2023-02-13	7	7.023333
446	1.71	2344	07:01:43	2023-02-13	7	7.028611
448	41.12	1664	07:02:58	2023-02-13	7	7.049444
449	2.47	2009	07:03:21	2023-02-13	7	7.055833
450	2.07	1771	07:03:43	2023-02-13	7	7.061944
451	1.48	1824	07:04:00	2023-02-13	7	7.066667
452	3.60	1466	07:04:27	2023-02-13	7	7.074167
453	47.40	2058	07:05:25	2023-02-13	7	7.090278
454	2.54	2040	07:05:48	2023-02-13	7	7.096667
457	8.22	1570	07:06:58	2023-02-13	7	7.116111
458	2.40	2295	07:07:21	2023-02-13	7	7.122500
459	1.56	2032	07:07:38	2023-02-13	7	7.127222
460	3.53	1667	07:08:04	2023-02-13	7	7.134444
461	61.83	2246	07:09:07	2023-02-13	7	7.151944
462	1.50	2027	07:09:24	2023-02-13	7	7.156667
463	1.81	1822	07:09:42	2023-02-13	7	7.161667
464	8.90	2022	07:10:21	2023-02-13	7	7.172500
465	4.91	2424	07:10:52	2023-02-13	7	7.181111
467	2.31	1696	07:11:30	2023-02-13	7	7.191667
468	2.75	2372	07:12:06	2023-02-13	7	7.201667
469	36.12	2107	07:13:04	2023-02-13	7	7.217778
470	1.49	2118	07:13:23	2023-02-13	7	7.223056
471	1.47	1825	07:13:41	2023-02-13	7	7.228056
472	1.89	1923	07:14:01	2023-02-13	7	7.233611
473	1.61	2242	07:14:19	2023-02-13	7	7.238611
474	12.85	2164	07:15:08	2023-02-13	7	7.252222
475	2.75	2499	07:15:32	2023-02-13	7	7.258889
477	3.13	1814	07:16:12	2023-02-13	7	7.270000
478	7.19	2313	07:16:48	2023-02-13	7	7.280000
479	1.46	2257	07:17:05	2023-02-13	7	7.284722

480	3.28	2168	07:17:33	2023-02-13	7	7.292500
481	1.77	2533	07:17:52	2023-02-13	7	7.297778
482	1.98	2440	07:18:13	2023-02-13	7	7.303611
483	12.09	2428	07:18:57	2023-02-13	7	7.315833
484	8.04	2469	07:19:34	2023-02-13	7	7.326111
485	2.14	2192	07:19:56	2023-02-13	7	7.332222
486	2.02	2056	07:20:17	2023-02-13	7	7.338056
487	2.86	2064	07:20:43	2023-02-13	7	7.345278
488	5.98	2214	07:21:17	2023-02-13	7	7.354722
489	2.10	2320	07:21:38	2023-02-13	7	7.360556
490	13.60	2234	07:22:26	2023-02-13	7	7.373889
491	8.27	2154	07:23:04	2023-02-13	7	7.384444
495	2.51	1624	07:24:11	2023-02-13	7	7.403056
496	12.47	2557	07:24:55	2023-02-13	7	7.415278
500	1.65	2034	07:25:59	2023-02-13	7	7.433056

```
[ ]: #Proporção de ods acima de 1.45
p_1457 = len(data_hora7[data_hora7['Odds'] >= 1.45])/len(data_hora7['Odds'])
p_1457
```

```
[ ]: 0.7540983606557377
```