

tickets__08022021

August 2, 2021

1 GSF Sigma Ticket Report 7/26/21-8/2/21

1.1 Load Data

```
[1]: import pandas as pd
import numpy as np

file_path = 'tickets_08022021.csv'

ticket_data = pd.read_csv(file_path, index_col = 0)
ticket_data.index = ticket_data.index.str.capitalize()
```

1.2 Guild Weekly Average Tickets

```
[2]: print(round(ticket_data.iloc[:,4:].stack().replace('-',600).astype('int64').
    ↳mean(),0))
```

591.0

1.3 All players with an average of 500 tickets or less

```
[3]: n = 500
under500 = ticket_data[ticket_data["averageTickets"] < 500]["averageTickets"]
print(under500)
```

Series([], Name: averageTickets, dtype: int64)

```
[4]: # All players who missed 3 or more days of tickets

ndays = 3
ticket_goal = 600
# Replacing with 600 so it doesn't count as a strike for getting 0s
dates = ticket_data.iloc[:, 4:].replace('-',600).astype('int64')
dates['missed'] = dates[dates < ticket_goal].count(1)
strike_days = ticket_data[dates['missed'] >= ndays].index
print(pd.DataFrame(strike_days))
```

	Name
0	Ilekkund
1	Agave

```
[5]: # All players with 0s
dates['zeros'] = dates[dates.iloc[:, :-1] == 0].count(1)
strike_zero = ticket_data[dates['zeros'] >= 1].index
print(pd.DataFrame(strike_zero))
```

	Name
0	Ilekkund

```
[6]: # Number of strikes
# Take the union of strike_days and strike_zero
names = set(strike_days) | set(strike_zero)
strikes = pd.DataFrame([0]*len(names), index = names, columns = ['numStrikes'])

# Add a strike for each violation
for name in strikes.index:
    if name in strike_days.values:
        if dates['missed'].loc[name] >= 2*ndays:
            strikes.loc[name] += 1
        strikes.loc[name] += 1
    if name in strike_zero.values:
        strikes.loc[name] += 1

strikes = strikes.sort_index()
print(strikes)
```

	numStrikes
Agave	1
Ilekkund	2

```
[ ]:
```