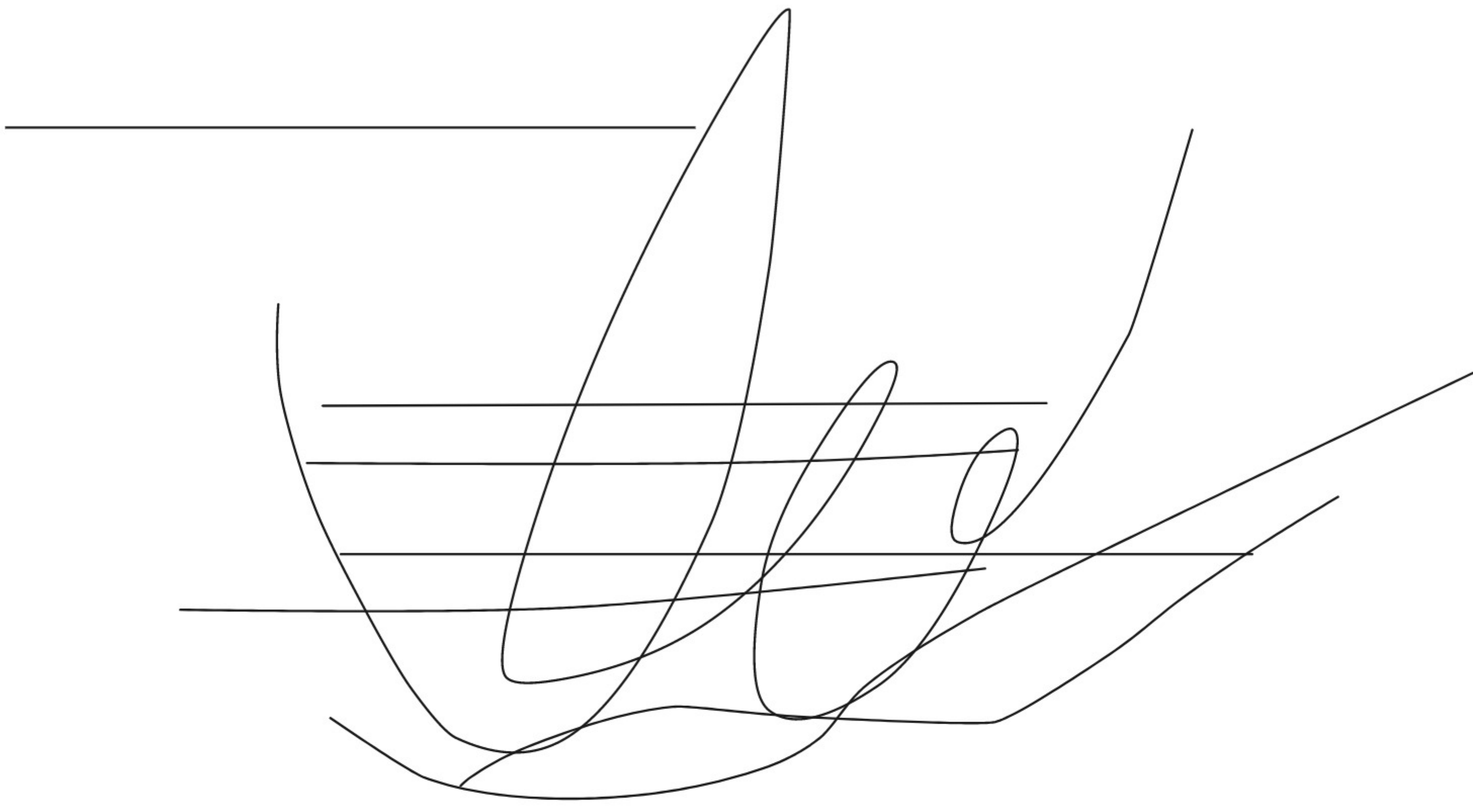
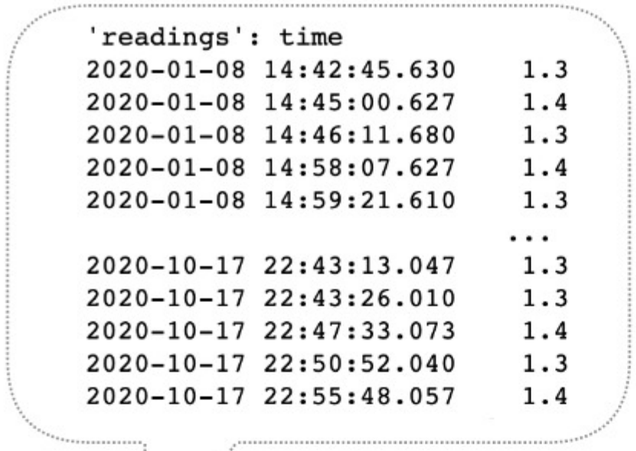
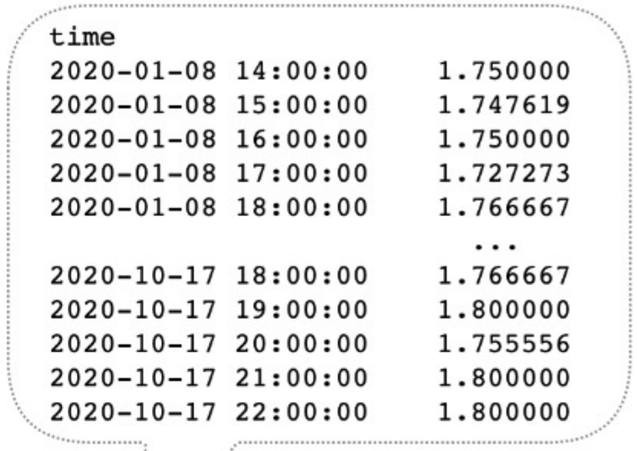
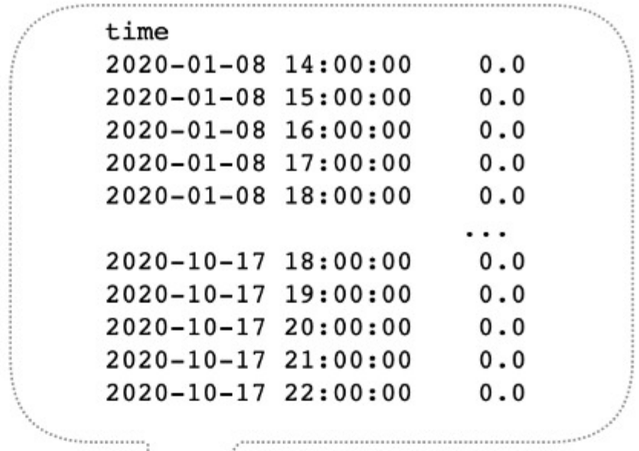




```
'readings': time
2020-01-08 14:42:45.630    1.3
2020-01-08 14:45:00.627    1.4
2020-01-08 14:46:11.680    1.3
2020-01-08 14:58:07.627    1.4
2020-01-08 14:59:21.610    1.3
                           ...
2020-10-17 22:43:13.047    1.3
2020-10-17 22:43:26.010    1.3
2020-10-17 22:47:33.073    1.4
2020-10-17 22:50:52.040    1.3
2020-10-17 22:55:48.057    1.4
```



```
time
2020-01-08 14:00:00    1.750000
2020-01-08 15:00:00    1.747619
2020-01-08 16:00:00    1.750000
2020-01-08 17:00:00    1.727273
2020-01-08 18:00:00    1.766667
                          ...
2020-10-17 18:00:00    1.766667
2020-10-17 19:00:00    1.800000
2020-10-17 20:00:00    1.755556
2020-10-17 21:00:00    1.800000
2020-10-17 22:00:00    1.800000
```



```
time
2020-01-08 14:00:00    0.0
2020-01-08 15:00:00    0.0
2020-01-08 16:00:00    0.0
2020-01-08 17:00:00    0.0
2020-01-08 18:00:00    0.0
                       ...
2020-10-17 18:00:00    0.0
2020-10-17 19:00:00    0.0
2020-10-17 20:00:00    0.0
2020-10-17 21:00:00    0.0
2020-10-17 22:00:00    0.0
```

Raw Series for one home

Resampled Series for one home

If used in each hour each day?

IfUsedInEachHour Series for one appliance

count and sum for each appliance in each hour

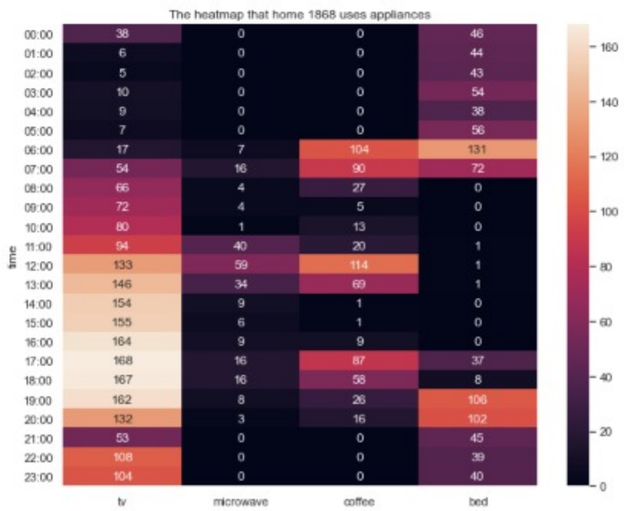
Patterns

TimesUsedInEachHour HeatMap for one home

sns.heatmap()

TimesUsedInEachHour DataFrame for one home

0-6 bed
6-7 bed; coffee
7-8 bed; coffee; tv
8-11 tv
11-12 microwave; tv
12-14 microwave; tv; coffee
14-17 tv
17-19 tv; coffee
19-24 tv; bed



time	tv	microwave	coffee	bed
00:00	38	0	0	46
01:00	6	0	0	44
02:00	5	0	0	43
03:00	10	0	0	54
04:00	9	0	0	38
...	...	...	...	...
19:00	162	8	26	106
20:00	132	3	16	102
21:00	53	0	0	45
22:00	108	0	0	39
23:00	104	0	0	40