1. How many rows the dataset **data['item'].count()**

2. What was the longest phone call / data entry? **data['duration'].max()**

3. How many seconds of phone calls are recorded in total? **data['duration'][data['item'] == 'call'].sum()**

4. How many entries are there for each month? **data['month'].value\_counts()**

5. How many number of non-null unique network entries? **data['network'].nunique()**

Create groups based on months **data.groupby(['month']).groups.keys()**

Count of items in the month 2014-11 **len(data.groupby(['month']).groups['2014-11'])**

Get the first entry for each month **data.groupby('month').first()**

Get the sum of the durations per month **data.groupby('month')['duration'].sum()**

Get the number of dates / entries in each month **data.groupby('month')['date'].count()**

What is the sum of durations, for calls only, to each network?

**data[data['item'] == 'call'].groupby('network')['duration'].sum()**

How many calls, sms, and data entries are in each month?

**data.groupby(['month', 'item'])['date'].count()**

How many calls, texts, and data are sent per month, split by network\_type?

**data.groupby(['month', 'network\_type'])['date'].count()**

Find the sum of ‘duration’ in month? **data.groupby('month', as\_index=True).agg({"duration": "sum"})**

Group the data frame by month and item and extract a number of stats from each group

**(data.groupby(['month', 'item']).agg({'duration':"sum", # find the sum of the durations for each group**

**'network\_type': "count", # find the number of network type entries**

**'date': 'first'})**

data.groupby(['month', 'item']).agg({'duration': ['min', 'max', 'sum'], # find the min, max, and sum of the duration column

'network\_type': "count", # find the number of network type entries

'date': 'first'})