In this operation we intended to examine the given city trip data set for a possible causal relationship between both travelling budget as stated in question 36 and travelling frequency both related to unique city visits as indicated in columns 4-23 and overall city trips within the year 2015 as stated in question 35.

Base hypothesis for this operation being that there is a direct causal relationship between a smaller budget and fewer unique, as well as fewer yearly city trips.

In the first step we extracted a subset of data from the main data dump, only containing data respective to travellers on the lowest budget.

In the next step, for lack of better technical possibilities, we manually assigned the sum of all people from the new „low budget“ subset, who stated they visited a certain city to a new variable.

The new dataframe df is now filled by column with the city names and the respective counter of low budget visitors respectively, overall.

For the unique cities visited dataset, the data points could just be added as the options 0 and 1 directly mathematically translate to a unique visit or no unique visit yet.

For the overall cities visited in 2015, we constructed a weighting scheme.

Answer: Mathematical translation:

1 0

2 1

3 2,5

4 4,5

5 6

Averaging those answers over any given answer, one data point is equal to 2.8 city trips in 2015.

We tried to make use of the given data, even though there are some critical issues, such as unprecise answer options, as in question 36. Assuming the logical interior consistency of our chosen weighting model, and the comparability of the datasets (low budget and average travellers), that it was applied to we can make a the following reasonable assumptions.

A1: Travellers on the lowest budget, below 200€, only travel to about 30.16% as many unique visitors as the average traveller does.

A2: : Travellers on the lowest budget, below 200€, only travelled about 32.09% as often in 2015 as the average traveller did.