Questions for Human and Social Data Science Applicants.

1. The following table shows, for a sample of towns in Great Britain, the number of lawyers, x, and the number of cars stolen last week, y.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| x | 12 | 7 | 11 | 19 | 5 | 21 | 3 | 4 | 17 |
| y | 14 | 3 | 21 | 28 | 6 | 43 | 1 | 12 | 30 |

a) Examine the data and describe the apparent relationship between the variables x and y.

b) Predict the number of cars that would have been stolen in a town with:

i) 15 lawyers

ii) 50 lawyers

c) How confident are you in each of your predictions?

d) Comment on the suggestion that most lawyers are car thieves.

2. Describe a data analysis project you have carried out (either in your academic or professional work or in your spare time). What methods did you use? What conclusions did you reach?