Relationship between social development and the number of offences in Leeds

Backgrounds:

The aim of this assignment is to examine the relationship between the development of Leeds society and the number of crimes committed. In order to promote better development of the city and create a livable city, it is necessary to reduce the number of crimes in the city. For this assignment, the number of youth population, the number of people not working, the number of people economically active and the number of crime offences in each area of Leeds have been chosen. By exploring the interaction between these four factors, it is intended to provide some new ideas to reduce the number of crimes in the city.

GitHub contains the following data:

1. All types of offences in Leeds in October 2021 (https://www.kaggle.com)
2. Leeds youth population in 2021 (https://www.ons.gov.uk/)
3. Leeds shape file with 2021 LSOA code (<https://geoportal.statistics.gov.uk/>)
4. Number of economically active people in Leeds in 2021(https://www.nomisweb.co.uk/sources/census\_2021\_bulk)
5. Number of people not working in Leeds, 2021(https://www.nomisweb.co.uk/sources/census\_2021\_bulk)

Purpose of the code:

The main purpose of the code is to clean the data and generate a spatial visualisation map and a non-spatial visualisation map. Cleaning the data makes the data more credible and easier to use. The code generates a spatial visualisation and a non-spatial visualisation and modifies them, such as the colour and size of the graphs, to make them more readable and easier to understand.