Analyze vehicle thefts in New Zealand to identify when and where they take place

**Excel**

**MySQL**

**Intermediate**

**Government**

**Geospatial**

**Time Series**

**Objective 1Identify when vehicles are likely to be stolen**Your first objective is to explore the vehicle and date fields in the stolen\_vehicles table to identify when vehicles tend to be stolen.

|  | **Task** |  |
| --- | --- | --- |
| **Mark as complete** | Find the number of vehicles stolen each year | Show hint |
| **Mark as complete** | Find the number of vehicles stolen each month | Show hint |
| **Mark as complete** | Find the number of vehicles stolen each day of the week | Show hint |
| **Mark as complete** | Replace the numeric day of week values with the full name of each day of the week (Sunday, Monday, Tuesday, etc.) | Show hint |
| **Mark as complete** | Create a bar chart that shows the number of vehicles stolen on each day of the week | Show hint |

**Objective 2Identify which vehicles are likely to be stolen**Your second objective is to explore the vehicle type, age, luxury vs standard and color fields in the stolen\_vehicles table to identify which vehicles are most likely to be stolen.

|  | **Task** |  |
| --- | --- | --- |
| **Mark as complete** | Find the vehicle types that are most often and least often stolen | Show hint |
| **Mark as complete** | For each vehicle type, find the average age of the cars that are stolen | Show hint |
| **Mark as complete** | For each vehicle type, find the percent of vehicles stolen that are luxury versus standard | Show hint |
| **Mark as complete** | Create a table where the rows represent the top 10 vehicle types, the columns represent the top 7 vehicle colors (plus 1 column for all other colors) and the values are the number of vehicles stolen | Show hint |
| **Mark as complete** | Create a heat map of the table comparing the vehicle types and colors | Show hint |

**Objective 3Identify where vehicles are likely to be stolen**Your third objective is to explore the population and density statistics in the regions table to identify where vehicles are getting stolen, and visualize the results using a scatter plot and map.

|  | **Task** |  |
| --- | --- | --- |
| **Mark as complete** | Find the number of vehicles that were stolen in each region | Show hint |
| **Mark as complete** | Combine the previous output with the population and density statistics for each region | Show hint |
| **Mark as complete** | Do the types of vehicles stolen in the three most dense regions differ from the three least dense regions? | Show hint |
| **Mark as complete** | Create a scatter plot of population versus density, and change the size of the points based on the number of vehicles stolen in each region | Show hint |
| **Mark as complete** | Create a map of the regions and color the regions based on the number of stolen vehicles | Show hint |

**Final StepFinal Project Question**Answer the following question to validate your completed project.

How many total vehicles were stolen in the most dense region?



Enter numbers only (no commas or special characters)