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From the start, my partner and I decided as a group to do our CA based on a crime dataset because we were both curious about the recurring nature of crime in Ireland. We wondered if crime rates had increased or decreased over time because we had similar interests. Even though we both tried to find a dataset that full filled the requirements my partner was the one who found. My main role in this joint project was to provide a thorough **Data Overview**, capture all relevant information, and perform **Data Cleaning** procedures to improve accuracy. I also took on the responsibility of examining **Descriptive Statistics** in order to determine the different variables that are present in our dataset. I also took on the responsibility of examining descriptive statistics in order to determine the different variables that are present in our dataset. I created the initial plot to start the analytical process and give a visual depiction of the total number of offenses for each category. In addition, I took on the responsibility of instructing the **Data exploratory analysis**, which comprised processes like **EDA filtering, aggregation, and Visualization**, resulting in a graphics plot that represented the total number of occurrences for each of the three Dublin stations. I was also in charge of **Dummy Encoding**, which included making dummy variables, integrating them with the dataset without any issues, and going over column names. Together with these duties, I included the **Dimensionality Reduction** initiatives and **Principal Component Analyses (PCA)** in an effort to provide a thorough and perceptive method for deciphering the complexities of the crime dataset. Our combined efforts were characterized by a proactive delegation of duties, by which I contributed it all from basic data analytical techniques, all directed toward the analysis of the complex dynamics of crime The way we worked together was that we assigned tasks proactively, and I contributed by using basic data analysis skills that were taught to us to analyse the complex dynamics of crime.