Preface

This project Report has been made in Partial fulfillment for the requirement of the course: Industry Project for Msc. Data Science and Spatial 9Analytics (Sem 4) in academic year 2023

To work on this project, the insurance data was collected from Data Bricks website and pension dataset was obtained from Public Plans Database

The objective behind taking this project was to understand how data mining techniques could be applied in actuarial science and try out different algorithm to integrate into the data to give as efficient and accurate performance that can be achieved. This would help in predicting whether the policyholder would claim for insurance and what would be the future status of the pension plans.

The challenges I faced while working on this project was many missing values in pension data and the problem of imbalance of class in insurance claim data and not much prior work on using data mining techniques to work on pension data sets

During my project work, my knowledge in understanding of the actuary has enhanced along with learning various methods about how to deal with class imbalance. I have did background study to understand what parameters are used from actuarial point of view to apply data mining techniques on data more smoothly.