# **Data Requirement**

The project requires access to historical employee performance data spanning the past five years, including employee demographics, department information, performance ratings, and any other relevant metrics. The data should be obtained from INX's internal HR database.

***[For dataset, refer the “Data” directory]***

# **Analysis Requirement**

The analysis should identify department-wise performance trends and patterns to understand variations in performance across different organizational units. The objective of the analysis is to develop a predictive model to forecast future Employee performance based on data. The model should achieve a minimum accuracy of 85% in predicting the performance

# **Tools and Software**

The project will utilize Python programming language along with libraries such as numpy, pandas, matplotlib, sweetviz, seaborn, scikit-learn for data preprocessing, model development, and visualization. Jupyter Notebook will be used as the primary development environment for code execution and documentation.

# **Hardware**

The analysis requires a machine with at least 8GB RAM and octa -core processor to handle the large datasets efficiently. However quad-core processors are sufficient for moderate data science workloads. Additionally, access to a GPU is preferred for accelerated model training.