**PE03: Programming Exercise**

Ludwig is an open-source AutoML tool developed by Uber that simplifies the process of building machine-learning models. It allows users to train and deploy models without writing any code by utilizing a declarative configuration file. Ludwig supports a wide range of data types, including text, images, and time series, making it versatile for various applications. With its user-friendly interface, robust preprocessing capabilities, and automated model selection and hyperparameter tuning, Ludwig accelerates the workflow from data preprocessing to model evaluation and deployment, making it accessible even to those with limited machine learning expertise.

First, we read our CSV input file as a dataset using pandas.

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Next, we define the model input and output features in our YAML Ludwig config file.

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After that, we use Ludwig to train on the dataset provided and the model configuration.

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Then, we test our training by predicting the output feature.

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Finally, we evaluate the performance of our training model.

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