This file gives an overview of the python program code aimed at predicting the Employee Turnover based on a few relevant features.

People/ HR Analytics involves data-driven approach to managing people at work. It involves various aspects during an employee life cycle like Recruitment, Retention, Performance Appraisal, Learning & development, employee engagement, satisfaction etc.

The code mainly uses Python's SCIKITLEARN library for performing a predicting modelling to predict the employees who are likely to leave or continue in the organization based on the features like satisfaction, number of work hours, compensation, department, tenure in company etc.
The flow follows a standard approach of data pre-processing, feature selection, model building, model evaluation, fine-tuning and final selection. We can see the Decision Classifier model, with appropriate hyper-parameter tuning yielding a good accuracy of about 97% on the test dataset. Based on our business problem (more focus on stayers or leavers) we can tune in better performances for Recall or Precision as desired.

Similar to fetching the best parameters during hyper-parameter tuning, we also fetch features indicating their relative importance in the model. As expected, we observe, the *satisfaction* quotient leading this list, followed by appraisal evaluation, tenure, time spent on project and so on. This list can be a great reference for prioritizing the corrective actions, if any.