Task 2 Regressors - Machine Learning

1. Select any table dataset from https://www.kaggle.com/datasets contains at least 10 attributes, 1000 records and class label attribute (min 3 classes). You can use the dataset used in the previous task #1, if it's suitable for regression tasks.
2. Write a Python program that creates regression models for the selected dataset with the following techniques:
   - Polynomial regression
   - Random forest
   - Gradient Boosting.
3. Make some tests with the mentioned algorithms with different hyper parameter values and K-fold. Select the best parameters for all the algorithms.
4. Estimate the importance of features for boosting and random forest.
5. Get classification performance metrics (r2 score, mean average error, mean square error) for all the models. Explain how these metrics are useful and when.
6. Write a short report containing the program and the results obtained.