SGD has been successfully applied to large-scale and sparse machine learning problems often encountered in text classification and natural language processing. Given that the data is sparse, the classifiers in this module easily scale to problems with more than 10^5 training examples and more than 10^5 features. Strictly speaking, SGD is merely an optimization technique and does not correspond to a specific family of machine learning models. It is only a way to train a model. Often, an instance of SGDClassifier or SGDRegressor will have an equivalent estimator in the scikit-learn API, potentially using a different optimization technique. For example, using SGDClassifier(loss='log\_loss') results in logistic regression, i.e. a model equivalent to LogisticRegression which is fitted via SGD instead of being fitted by one of the other solvers in LogisticRegression. Similarly, SGDRegressor(loss='squared\_error', penalty='l2') and Ridge solve the same optimization problem, via different means.