

List of ML APIs from sklearn and other modules.

Module	API
sklearn.feature_extraction	<ul style="list-style-type: none"><li>- DictVectorizer</li><li>- FeatureHasher</li></ul>
sklearn.feature_extraction.text	<ul style="list-style-type: none"><li>- TfidfVectorizer</li><li>- CountVectorizer</li><li>- HashVectorizer</li></ul>
sklearn.feature_selection	<ul style="list-style-type: none"><li>- VarianceThreshold</li><li>- SelectKBest</li><li>- SelectPercentile</li><li>- GenericUnivariateSelect</li><li>- mutual_info_regression</li><li>- mutual_info_classif</li><li>- RFE</li><li>- RFECV</li><li>- SelectFromModel</li><li>- SequentialFeatureSelector</li></ul>
sklearn.impute	<ul style="list-style-type: none"><li>- SimpleImputer</li><li>- KNNImputer</li><li>- MissingIndicator</li></ul>
sklearn.preprocessing	<ul style="list-style-type: none"><li>- StandardScaler</li><li>- MinMaxScaler</li><li>- MaxAbsScaler</li><li>- FunctionTransformer</li><li>- PolynomialFeatures</li><li>- KBinsDiscretizer</li><li>- OneHotEncoder</li><li>- LabelEncoder</li><li>- OrdinalEncoder</li><li>- LabelBinarizer</li><li>- MultiLabelBinarizer</li><li>- add_dummy_feature</li></ul>
sklearn.compose	<ul style="list-style-type: none"><li>- ColumnTransformer</li><li>- TransformedTargetRegressor</li></ul>
sklearn.linear_model	<ul style="list-style-type: none"><li>- LinearRegression</li><li>- SGDRegressor</li><li>- Lasso, LassoCV</li><li>- Ridge, RidgeCV</li><li>- LogisticRegression, LogisticRegressionCV</li><li>- SGDClassifier</li></ul>

Module	API
	<ul style="list-style-type: none"> <li>- RidgeClassifier, RidgeClassifierCV</li> <li>- Perceptron</li> </ul>
sklearn.svm	<ul style="list-style-type: none"> <li>- SVC</li> </ul>
sklearn.naive_bayes	<ul style="list-style-type: none"> <li>- MultinomialNB</li> <li>- GaussianNB</li> <li>- BernoulliNB</li> </ul>
sklearn.ensemble	<ul style="list-style-type: none"> <li>- RandomForestRegressor</li> </ul>
sklearn.dummy	<ul style="list-style-type: none"> <li>- DummyRegressor</li> <li>- DummyClassifier</li> </ul>
sklearn.datasets	<ul style="list-style-type: none"> <li>- load_iris, load_wine, load_diabetes</li> <li>- fetch_california_housing, fetch_20_newsgroups</li> <li>- fetch_openml</li> <li>- make_regression</li> <li>- make_blobs</li> <li>- make_classification</li> <li>- make_multilabel_classification</li> </ul>
keras.datasets	mnist
sklearn.model_selection	<ul style="list-style-type: none"> <li>- train_test_split</li> <li>- cross_validate</li> <li>- cross_val_score</li> <li>- cross_val_predict</li> <li>- learning_curve</li> <li>- validation_curve</li> <li>- ShuffleSplit</li> <li>- StratifiedShuffleSplit</li> <li>- permutation_test_score</li> <li>- GridSearchCV</li> <li>- RandomizedSearchCV</li> </ul>
sklearn.metrics	<ul style="list-style-type: none"> <li>- mean_squared_error</li> <li>- mean_absolute_error</li> <li>- mean_absolute_percentage_error</li> <li>- log_loss</li> <li>- hinge_loss</li> <li>- confusion_matrix</li> <li>- ConfusionMatrixDisplay</li> <li>- precision_score</li> <li>- recall_score</li> <li>- make_scorer</li> <li>- classification_report</li> </ul>

Module	API
	<ul style="list-style-type: none"> <li>- precision_recall_curve</li> <li>- roc_curve</li> <li>- plot_roc_curve</li> <li>- roc_auc_curve</li> </ul>
sklearn.decomposition	- PCA
sklearn.pipeline	<ul style="list-style-type: none"> <li>- make_pipeline</li> <li>- Pipeline</li> <li>- FeatureUnion</li> </ul>
sklearn.set_config	- set_config
sklearn.utils	- all_estimators
sklearn.utils.multiclass	- type_of_target
scipy.stats	<ul style="list-style-type: none"> <li>- uniform</li> <li>- loguniform</li> </ul>
imblearn.under_sampling	- RandomUnderSampler
imblearn.over_sampling	<ul style="list-style-type: none"> <li>- RandomOverSampler</li> <li>- SMOTE</li> </ul>
warnings	- filterwarnings
numpy	<ul style="list-style-type: none"> <li>- array</li> <li>- arange</li> <li>- linspace, logspace</li> <li>- to_numpy</li> <li>- unique</li> <li>- zeros, ones</li> <li>- where</li> <li>- argmax, argmin</li> <li>- argsort</li> <li>- random.seed</li> <li>- random.permutation</li> <li>- count_nonzero</li> <li>- var, std</li> <li>- row_stack (vstack), column_stack (hstack)</li> </ul>
pandas	<ul style="list-style-type: none"> <li>- DataFrame</li> <li>- read_csv</li> <li>- concat</li> </ul>

Module	API
	<ul style="list-style-type: none"> <li>- get_dummies</li> <li>- var, std</li> </ul>
pandas.plotting	<ul style="list-style-type: none"> <li>- scatter_matrix</li> </ul>
sns	<ul style="list-style-type: none"> <li>- histplot</li> <li>- scatterplot</li> <li>- heatmap</li> <li>- pairplot</li> <li>- set_style</li> </ul>

### List of object based APIs

Object	API/property/attribute
DataFrame	<ul style="list-style-type: none"> <li>- head, tail</li> <li>- columns</li> <li>- loc, iloc</li> <li>- info, describe</li> <li>- insert, pop</li> <li>- copy</li> <li>- plot, boxplot</li> <li>- corr</li> <li>- drop, dropna</li> <li>- isna, isnull, notna, isna</li> <li>- reset_index</li> <li>- replace</li> <li>- transpose, T</li> <li>- hist</li> <li>- sum, mean, median, var, std</li> </ul>
Numpy array	<ul style="list-style-type: none"> <li>- shape</li> <li>- reshape</li> <li>- transpose, T</li> <li>- mean, median, var, std</li> <li>- ravel</li> </ul>
Series	<ul style="list-style-type: none"> <li>- value_counts</li> <li>- unique</li> <li>- count</li> <li>- replace</li> <li>- mean, median, var, std</li> <li>- hist</li> </ul>

Object	API/property/attribute
Bunch	<ul style="list-style-type: none"> <li>- frame</li> <li>- data</li> <li>- target</li> <li>- target_names</li> <li>- feature_names</li> </ul>
DictVectorizer, VarianceThreshold	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> </ul>
SelectKBest SelectPercentile GenericUnivariateSelect RFE/RFECV SelectFromModel SequentialFeatureSelector PolynomialFeatures	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> <li>- get_feature_names_out</li> </ul>
SimpleImputer	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> <li>- statistics_</li> <li>- median</li> </ul>
PCA	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> <li>- explained_variance</li> </ul>
RandomUnderSampler RandomOverSampler SMOTE	<ul style="list-style-type: none"> <li>- fit_resample</li> </ul>
KNNImputer MissingIndicator	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> </ul>
StandardScaler, MinMaxScaler, MaxAbsScaler	<ul style="list-style-type: none"> <li>- fit, partial_fit, transform, fit_transform</li> </ul>
csr_matrix	<ul style="list-style-type: none"> <li>- toarray, todense</li> </ul>
DictVectorizer	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> </ul>
OrdinalEncoder, OneHotEncoder, LabelEncoder,	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> <li>- categories_</li> </ul>
LabelBinarizer, MultilabelBinarizer	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> <li>- classes_</li> </ul>

Object	API/property/attribute
Pipeline	- fit, transform, fit_transform - score
FunctionTransformer, ColumnTransformer, KBinsDiscretizer	- fit, transform, fit_transform
LinearRegression Ridge Lasso	- fit - predict - score - coef_, intercept_
DummyRegressor TransformedTargetRegressor	- fit - predict - score
SGRRegressor SGDClassifier	- fit, partial_fit - predict - score - coef_, intercept_, n_iter_t_
DecisionTreeRegressor RandomForestRegressor	- fit - predict - score - feature_importances_
Perceptron	- fit, partial_fit - predict - score - classes_, coef_, intercept_
LogisticRegression	- fit - predict - score - classes_, coef_, intercept_
KNeighborsClassifier	- fit - predict - score - classes_
SVC	- fit - predict - score - classes_, coef_, intercept_ - support_, support_vectors_, n_support_

Object	API/property/attribute
GridSearchCV RandomizedSearchCV	<ul style="list-style-type: none"> <li>- fit</li> <li>- predict</li> <li>- cv_results_ (only after fit)</li> <li>- best_index_</li> <li>- best_estimator_</li> <li>- best_params_</li> <li>- best_score_</li> </ul>
RidgeCV	<ul style="list-style-type: none"> <li>- best_index_</li> <li>- best_estimator_</li> <li>- best_params_</li> <li>- best_score_</li> </ul>
StratifiedShuffleSplit	<ul style="list-style-type: none"> <li>- split</li> </ul>
PCA	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> </ul>
CountVectorizer	<ul style="list-style-type: none"> <li>- fit, transform, fit_transform</li> <li>vocabulary_</li> </ul>