

Adaboost

November 15, 2022

```
[ ]: from sklearn.ensemble import AdaBoostClassifier
     from sklearn import datasets
     from sklearn.model_selection import train_test_split
     from sklearn import metrics
```

```
[ ]: iris = datasets.load_iris()
     X = iris.data
     y = iris.target
```

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[ ]: X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3)
```

```
[ ]: abc = AdaBoostClassifier(n_estimators=50,
                             learning_rate=1)
     model = abc.fit(X_train, y_train)
     y_pred = model.predict(X_test)
```

```
[ ]: print("Accuracy:", metrics.accuracy_score(y_test, y_pred))
```

Accuracy: 0.9555555555555556

```
[ ]: from sklearn.ensemble import AdaBoostClassifier
     from sklearn.svm import SVC
     from sklearn import metrics
     svc=SVC(probability=True, kernel='linear')
     abc =AdaBoostClassifier(n_estimators=50, base_estimator=svc, learning_rate=1)
     model = abc.fit(X_train, y_train)
```

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[ ]: y_pred = model.predict(X_test)
```

```
[ ]: print("Accuracy:", metrics.accuracy_score(y_test, y_pred))
```

Accuracy: 1.0