

## IMPLEMENT ENSEMBLE ALGORITHMS

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IDE: PyCharm

Compiler: Terminal (Python 3.6)

Source Code:

```
from sklearn.ensemble import AdaBoostClassifier
# Import Support Vector Classifier

# Load data
iris = datasets.load_iris()
X = iris.data
y = iris.target

# Create adaboost classifier object
abc = AdaBoostClassifier(n_estimators=50, learning_rate=1)
# Train Adaboost Classifier
model = abc.fit(X_train, y_train)

#Predict the response for test dataset
y_pred = model.predict(X_test)

from sklearn.svm import SVC
#Import scikit-learn metrics module for accuracy calculation
from sklearn import metrics

svc=SVC(probability=True, kernel='linear')

# Create adaboost classifier object
abc =AdaBoostClassifier(n_estimators=50,
```

```
base_estimator=svc,learning_rate=1 )

# Train Adaboost Classifier
model = abc.fit(X_train, y_train)

#Predict the response for test dataset
y_pred = model.predict(X_test)

# Model Accuracy, how often is the classifier correct?
print("Accuracy:",metrics.accuracy_score(y_test, y_pred))
```

## OUTPUT

```
Accuracy: 0.9555555555555556
```