**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 classifer object  
abc = AdaBoostClassifier(n\_estimators=50, learning\_rate=1)  
# Train Adaboost Classifer  
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 classifer object  
abc =AdaBoostClassifier(n\_estimators=50, base\_estimator=svc,learning\_rate=1)

# Train Adaboost Classifer  
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