```
import pandas as pd
import numpy as np
df = pd.DataFrame(pd.Series([12,14,1,8,4,33,0,24,17,10]),
columns=['sample'])
print(df.sample(10, replace=True))
print(df.sample(10, replace=True))
# 8, 10, 24
   sample
8
       17
       14
1
5
       33
0
       12
9
       10
6
        0
4
        4
1
       14
0
       12
4
        4
   sample
5
       33
5
       33
2
        1
5
       33
1
       14
0
       12
0
       12
5
       33
6
        0
6
        0
from sklearn.datasets import make classification
from sklearn.model selection import train test split
from sklearn.ensemble import RandomForestClassifier
from sklearn.metrics import accuracy score
# Create a synthetic dataset
X, y = \text{make classification}(n \text{ samples} = 1000, n \text{ features} = 20,
n informative=15, n redundant=5, random state=42)
# Split the data into training and testing sets
X train, X test, y train, y test = train test split(X, y,
test size=0.2, random state=42)
# Initialize the classifier with oob score=True
rf = RandomForestClassifier(oob score=True, random state=42)
# Train the classifier
```

```
rf.fit(X train, y train)
# Predict the labels of the test set
predictions = rf.predict(X test)
# Compute the accuracy of the classifier
accuracy = accuracy_score(y_test, predictions)
# Get the OOB score
oob_score = rf.oob_score_
accuracy, oob score
(0.9, 0.9075)
from sklearn.datasets import make classification
from sklearn.model selection import train test split
from sklearn.ensemble import RandomForestClassifier,
ExtraTreesClassifier
from sklearn.metrics import accuracy score
# Create a synthetic dataset
X, y = make classification(n samples=1000, n features=20,
n informative=15, n redundant=5, random state=42)
# Split the data into training and testing sets
X_train, X_test, y_train, y_test = train_test_split(X, y,
test size=0.2, random state=42)
# Initialize the classifiers
rf = RandomForestClassifier(random state=42)
et = ExtraTreesClassifier(random state=42)
# Train the classifiers
rf.fit(X train, y_train)
et.fit(X train, y train)
# Predict the labels of the test set
rf predictions = rf.predict(X test)
et predictions = et.predict(X test)
# Compute the accuracy of the classifiers
rf_accuracy = accuracy_score(y_test, rf_predictions)
et accuracy = accuracy score(y test, et predictions)
rf_accuracy, et_accuracy
(0.9, 0.935)
```