```
import numpy as np
from sklearn.neighbors import KNeighborsClassifier
from sklearn.datasets import load_wine
import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier


data=load_wine()
X = pd.DataFrame(data=data['data'], columns=data['feature_names'])
y = data['target']
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
```

Criterion => Gini impurity

```
classifier=RandomForestClassifier(criterion='gini',bootstrap=True)
classifier.fit(X_train,y_train);



y_pred=classifier.predict(X_test)
print(classifier.score(X_test,y_test))
```

```
1.0
```

Criterion => Entropy

```
classifier=RandomForestClassifier(criterion='entropy',bootstrap=True)
classifier.fit(X_train,y_train);
y_pred1=classifier.predict(X_test)
print(classifier.score(X_test, y_test))
```

```
1.0
```

```
**Criterion => Log Loss**
```

Criterion => Log Loss

```
classifier=RandomForestClassifier(criterion='log_loss',bootstrap=True)
classifier.fit(X_train,y_train);
y_pred1=classifier.predict(X_test)
print(classifier.score(X_test, y_test))
```

```
1.0
```

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