

----- Write a python code to show ensemble technique using Boosting mechanism.

```
In [154... X = meddata.drop('Diagnosis', axis=1)
y = meddata['Diagnosis']
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.20)
```

```
In [155... #PROCESS 2
model = AdaBoostClassifier(n_estimators=num_trees)
model.fit(X_train, y_train)
```

C:\Users\SUPRATIM NAG\anaconda3\Lib\site-packages\sklearn\ensemble_weight_boosting.py:519: FutureWarning: The SAMME.R algorithm (the default) is deprecated and will be removed in 1.6. Use the SAMME algorithm to circumvent this warning.

warnings.warn(

```
Out[155... ▾ AdaBoostClassifier 1 2
AdaBoostClassifier(n_estimators=10)
```

```
In [156... y_pred = model.predict(X_test)
```

```
In [157... model.score(X_test, y_test)
```

```
Out[157... 0.65
```

```
In [158... from sklearn.metrics import classification_report, confusion_matrix
print(confusion_matrix(y_test,y_pred))
print(classification_report(y_test,y_pred))
```

```
[[9 3]
 [4 4]]
```

	precision	recall	f1-score	support
0	0.69	0.75	0.72	12
1	0.57	0.50	0.53	8
accuracy			0.65	20
macro avg	0.63	0.62	0.63	20
weighted avg	0.64	0.65	0.65	20

```
In [ ]:
```