```
from sklearn.metrics import accuracy_score,recall_score,roc_auc_score,confusion_matrix
from sklearn.metrics import classification_report

print(y_train.shape)
print(y_pred.shape)


print(classification_report(y_test,y_pred))
```

```
(280,)
(120,)
              precision    recall  f1-score   support

       False       0.17      0.11      0.13         9
        True       0.93      0.95      0.94       111

    accuracy                           0.89       120
   macro avg       0.55      0.53      0.54       120
weighted avg       0.87      0.89      0.88       120
```

```
from sklearn.metrics import accuracy_score,recall_score,roc_auc_score
print(y_train.shape)
print(y_pred.shape)


print(classification_report(y_test,y_pred))
```

```
(280,)
(120,)
              precision    recall  f1-score   support

       False       0.17      0.11      0.13         9
        True       0.93      0.95      0.94       111
```

```python
from sklearn.metrics import accuracy_score,recall_score,roc_auc_score,confusion_matrix
y_test=(y_test>0.5)
print("\nAccuracy score: %f" %(accuracy_score(y_test,y_pred)*100))
print("Recall score : %f n" %(recall_score(y_test,y_pred)*100))
print("ROC score : %f\n" %(roc_auc_score(y_test,y_pred)*100))
print(confusion_matrix(y_test,y_pred))
```

```
Accuracy score: 89.166667
Recall score : 95.495495 n
ROC score : 53.303303

[[  1   8]
 [  5 106]]
```

```python
model.compile(loss='binary_crossentropy',optimizer='adam',metrics=['accuracy'])
```

```python
model.fit(x_train,y_train,batch_size=20,epochs=100)
```

```
14/14 [==============================] - 0s 6ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 73/100
14/14 [==============================] - 0s 8ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 74/100
14/14 [==============================] - 0s 5ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 75/100
14/14 [==============================] - 0s 6ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 76/100
14/14 [==============================] - 0s 5ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 77/100
14/14 [==============================] - 0s 4ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 78/100
14/14 [==============================] - 0s 3ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 79/100
14/14 [==============================] - 0s 5ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 80/100
14/14 [==============================] - 0s 7ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 81/100
14/14 [==============================] - 0s 4ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 82/100
14/14 [==============================] - 0s 7ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 83/100
14/14 [==============================] - 0s 3ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 84/100
14/14 [==============================] - 0s 4ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 85/100
14/14 [==============================] - 0s 5ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 86/100
14/14 [==============================] - 0s 5ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 87/100
14/14 [==============================] - 0s 5ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 88/100
14/14 [==============================] - 0s 11ms/step - loss: 6.8060 - accuracy: 0.4964
Epoch 89/100
```