

```
mdl_2.fit(X_2_train, y_2_train)
```

Python

```
# Train score on this version of the model  
mdl_2.score(X_2_train, y_2_train)
```

Python

```
# R^2 test score and f1 score for this model  
y_2_preds = mdl_2.predict(X_2_test)  
mdl_2.score(X_2_test, y_2_test), f1_score(y_2_test, y_2_preds, average = 'macro')
```

Python

```
... (0.94579945799458, np.float64(0.9239085687864604))
```

This test score is MUCH better! This indicates that this version of our model is the best out of what we developed so far.

```
# Also has high precision and recall, indicating low bias towards one category or the other.  
precision_score(y_2_test, y_2_preds, average = 'macro'), recall_score(y_2_test, y_2_preds, average = 'macro')
```

Python

```
... (np.float64(0.9569334325595594), np.float64(0.8977236888639247))
```