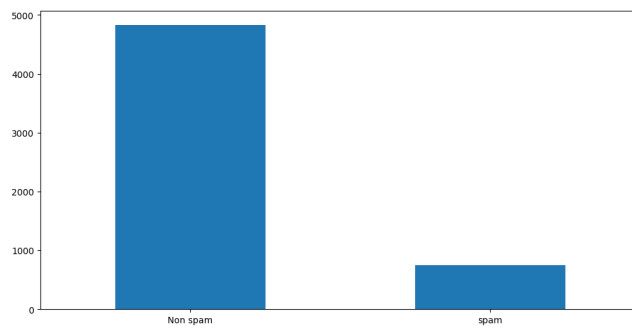


```
      label1
count  5572.000000
mean    0.134063

df.shape

(5572, 5)
25%    0.000000

df["label1"].value_counts().plot(kind="bar",figsize=(12,6))
plt.xticks(np.arange(2),('Non spam','spam'),rotation=0);
```



```
from sklearn.tree import DecisionTreeClassifier
model=DecisionTreeClassifier()
model.fit(x_train_res,y_train_res)
```

```
DecisionTreeClassifier
```