

```
df.isna().sum()
```

```
v1          0
v2          0
Unnamed: 2   5522
Unnamed: 3   5560
Unnamed: 4   5566
dtype: int64
```

```
df.rename({"v1":"label","v2":"text"},inplace=True,axis=1)
```

```
df.tail()
```

	label	text	Unnamed: 2	Unnamed: 3	Unnamed: 4
5567	spam	This is the 2nd time we have tried 2 contact u...	NaN	NaN	NaN
5568	ham	Will i_b going to esplanade fr home?	NaN	NaN	NaN
5569	ham	Pity, * was in mood for that. So...any other s...	NaN	NaN	NaN
----	.	The auv did some bitching but I acted like

```
from sklearn.datasets import load_iris
iris=load_iris()
x=iris.data
y=iris.target
```

```
from sklearn.preprocessing import LabelEncoder
le = LabelEncoder()
df['label']=le.fit_transform(df['label'])
```

```
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2)
```