Data Science Basic 2

September 1, 2019

Logistic Regression

[10]:
```
from sklearn.datasets import load_iris
iris=load_iris()
X=iris.data
y=iris.target
from sklearn.linear_model import LogisticRegression
logisticreg=LogisticRegression()
logisticreg.fit(X,y)
```

```
/home/sakil/anaconda/lib/python3.7/site-
packages/sklearn/linear_model/logistic.py:432: FutureWarning: Default solver
will be changed to 'lbfgs' in 0.22. Specify a solver to silence this warning.
  FutureWarning)
/home/sakil/anaconda/lib/python3.7/site-
packages/sklearn/linear_model/logistic.py:469: FutureWarning: Default
multi_class will be changed to 'auto' in 0.22. Specify the multi_class option to
silence this warning.
  "this warning.", FutureWarning)
```

[10]:
```
LogisticRegression(C=1.0, class_weight=None, dual=False, fit_intercept=True,
                   intercept_scaling=1, l1_ratio=None, max_iter=100,
                   multi_class='warn', n_jobs=None, penalty='l2',
                   random_state=None, solver='warn', tol=0.0001, verbose=0,
                   warm_start=False)
```

[11]:
```
Prediction_lr=logisticreg.predict([[2,4,3,1],[4,6,5,3]])
print(Prediction_lr)
```

```
[2 2]
```

[12]:
```
print(iris.target_names)
```

```
['setosa' 'versicolor' 'virginica']
```

[14]:
```
Prediction_lr=logisticreg.predict([[5.1,3.5,1.4,0.2],[6.3,3.3,4.7,1.6]])
print(Prediction_lr)
```

```
[0 1]
```