

Python 3.6.4 |Anaconda custom (64-bit)| (default, Jan 16 2018, 10:22:32) [MSC v.1900 64 bit (AMD64)]

Type "copyright", "credits" or "license" for more information.

IPython 6.1.0 -- An enhanced Interactive Python.

```
In [1]: 'D:/MachineLearning/Machine Learning A-Z/Part 3 - Classification/Section 14
- Logistic Regression/Logistic_Regression/Adult dataset/adult.py' = 'D:/MachineLearning/
Machine Learning A-Z/Part 3 - Classification/Section 14 - Logistic Regression/
Logistic_Regression/Adult dataset'
```

C:\Users\Hemanth kumar\Anaconda3\lib\site-packages\sklearn\cross_validation.py:41:

DeprecationWarning: This module was deprecated in version 0.18 in favor of the model_selection module into which all the refactored classes and functions are moved. Also note that the interface of the new CV iterators are different from that of this module. This module will be removed in 0.20.

"This module will be removed in 0.20.", DeprecationWarning)

#####

N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--

initial error= 0.8655675828978814

D:/MachineLearning/Machine Learning A-Z/Part 3 - Classification/Section 14 - Logistic Regression/Logistic_Regression/Adult dataset/adult.py:78: RuntimeWarning: overflow encountered in exp

hx=1/(1+np.exp(-thetax))

D:/MachineLearning/Machine Learning A-Z/Part 3 - Classification/Section 14 - Logistic Regression/Logistic_Regression/Adult dataset/adult.py:124: RuntimeWarning: divide by zero encountered in log

yone+=y[i]*np.log(h(x[i],theta))

D:/MachineLearning/Machine Learning A-Z/Part 3 - Classification/Section 14 - Logistic Regression/Logistic_Regression/Adult dataset/adult.py:124: RuntimeWarning: invalid value encountered in multiply

yone+=y[i]*np.log(h(x[i],theta))

D:/MachineLearning/Machine Learning A-Z/Part 3 - Classification/Section 14 - Logistic Regression/Logistic_Regression/Adult dataset/adult.py:125: RuntimeWarning: divide by zero encountered in log

yzero+=(1-y[i])*np.log(1-h(x[i],theta))

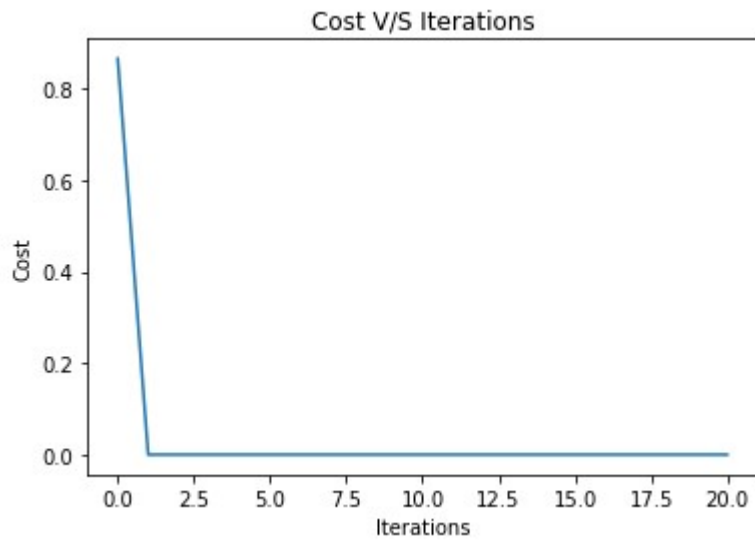
D:/MachineLearning/Machine Learning A-Z/Part 3 - Classification/Section 14 - Logistic Regression/Logistic_Regression/Adult dataset/adult.py:125: RuntimeWarning: invalid value encountered in multiply

yzero+=(1-y[i])*np.log(1-h(x[i],theta))

100% (20 of 20) |#####| Elapsed Time: 0:00:18 Time: 0:00:18

alpha= 0.2

max_iterations= 20

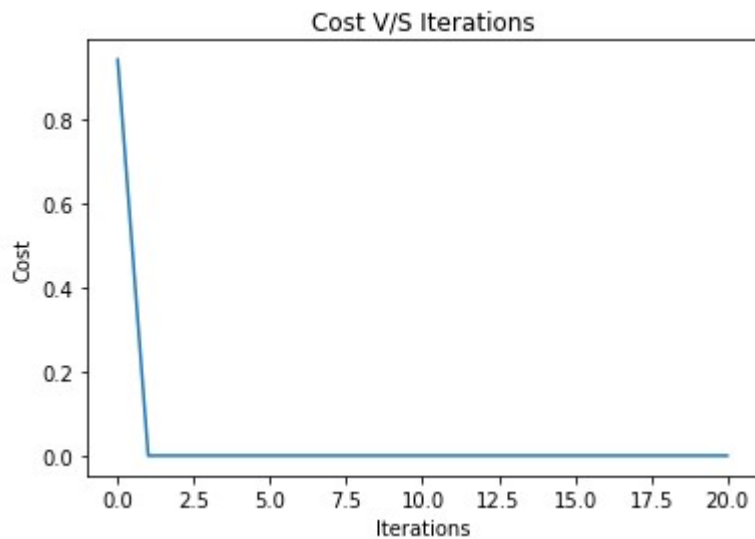


Train Accuracy Score: 74.24924924924925 %
 Test Accuracy Score: 72.88916180534234 %

#####

N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--
 initial error= 0.9429940327356614
 100% (20 of 20) | #####| Elapsed Time: 0:00:14 Time: 0:00:14

alpha= 0.01
 max_iterations= 20



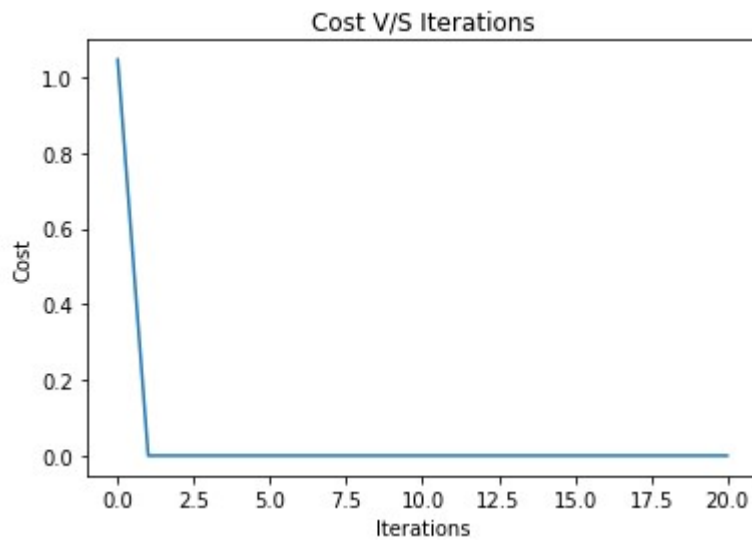
Train Accuracy Score: 74.44376194376194 %
 Test Accuracy Score: 73.07338041142155 %

#####

N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--
 initial error= 1.0466367208233196
 100% (20 of 20) | #####| Elapsed Time: 0:00:14 Time: 0:00:14

alpha= 0.00075

max_iterations= 20



Train Accuracy Score: 74.747474747475 %

Test Accuracy Score: 73.25759901750077 %

#####

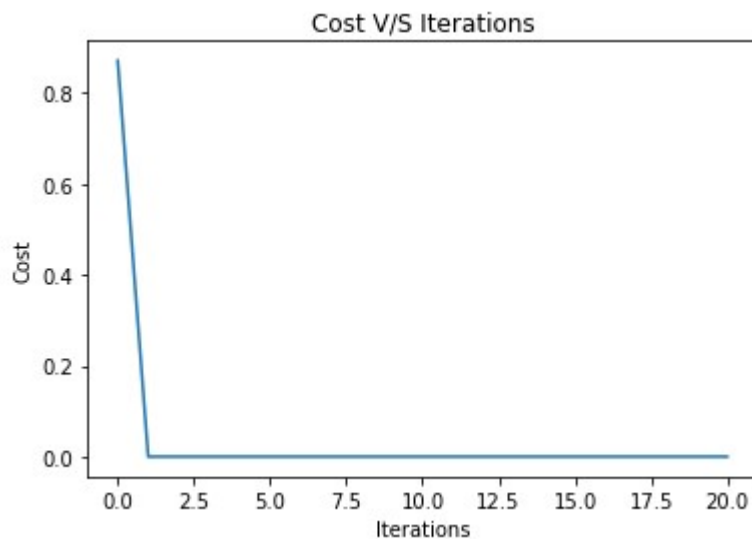
N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--

initial error= 0.8713790076261073

100% (20 of 20) |#####| Elapsed Time: 0:00:14 Time: 0:00:14

alpha= 0.0006

max_iterations= 20



Train Accuracy Score: 75.18768768768768 %

Test Accuracy Score: 73.53392692661959 %

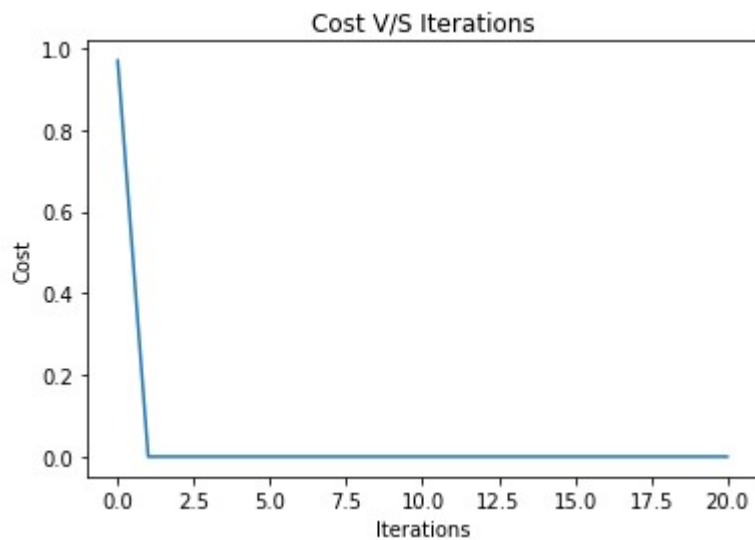
#####

N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--

initial error= 0.969893150007836

100% (20 of 20) |#####| Elapsed Time: 0:00:15 Time: 0:00:15

alpha= 0.0005
max_iterations= 20

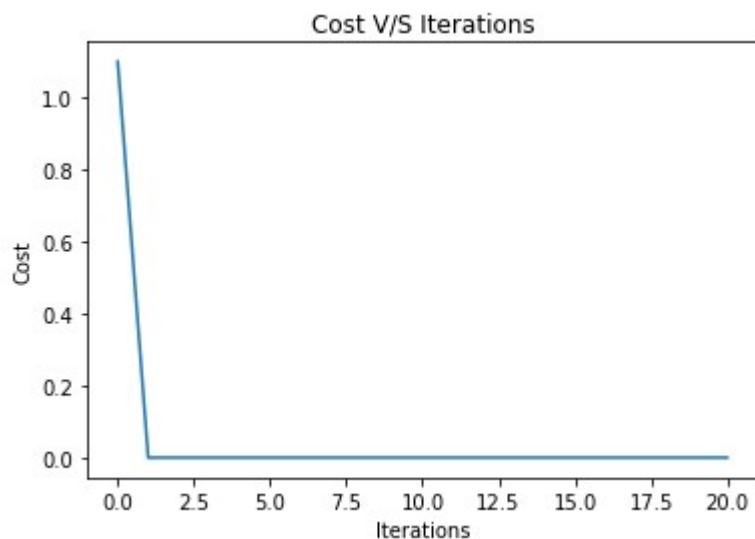


Train Accuracy Score: 75.6995631995632 %
Test Accuracy Score: 74.20939514891003 %

#####

N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--
initial error= 1.0977395021638796
100% (20 of 20) |#####| Elapsed Time: 0:00:14 Time: 0:00:14

alpha= 0.0002
max_iterations= 20



Train Accuracy Score: 82.5859950859951 %
Test Accuracy Score: 81.08688977586736 %

#####

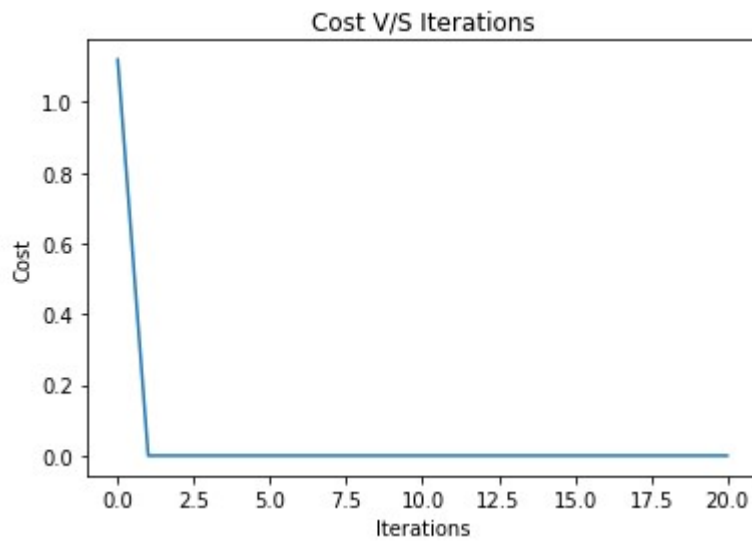
N/A% (0 of 20) | Elapsed Time: 0:00:00 ETA: --:--:--

initial error= 1.119768455191201

100% (20 of 20) |#####| Elapsed Time: 0:00:14 Time: 0:00:14

alpha= 9e-05

max_iterations= 20



Train Accuracy Score: 82.3983073983074 %

Test Accuracy Score: 81.02548357384096 %

#####

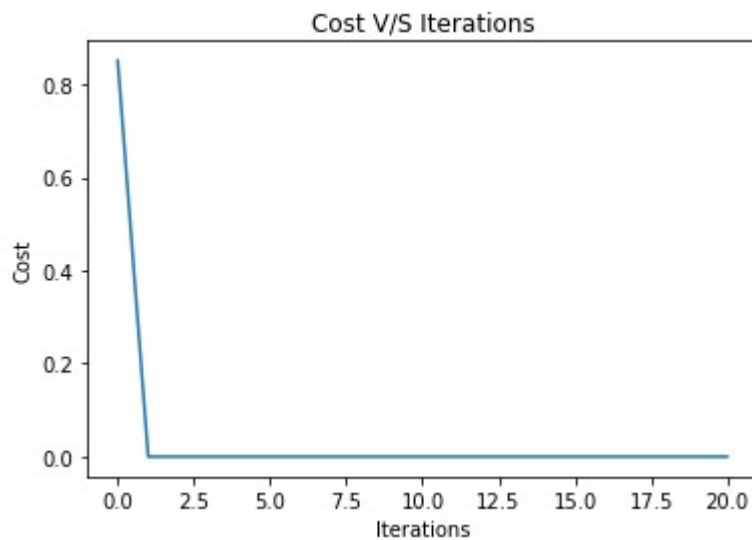
N/A% (0 of 20) | | Elapsed Time: 0:00:00 ETA: --:--:--

initial error= 0.8510375132573744

100% (20 of 20) |#####| Elapsed Time: 0:00:14 Time: 0:00:14

alpha= 9.9e-05

max_iterations= 20



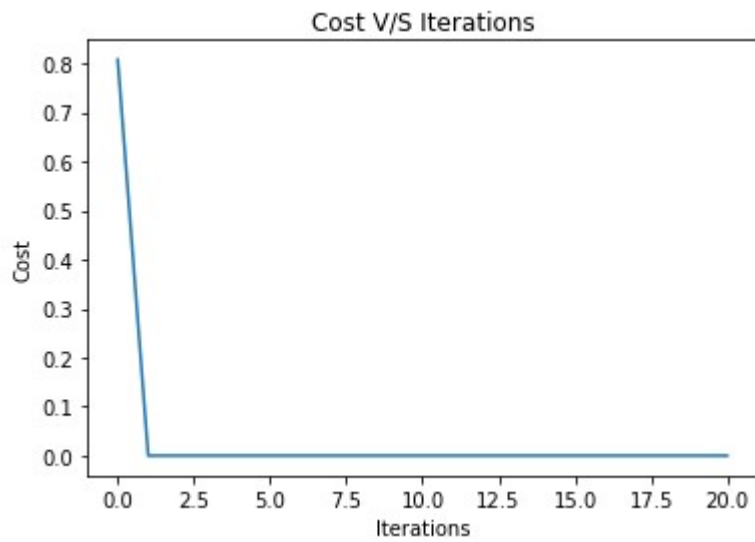
Train Accuracy Score: 82.42219492219492 %

Test Accuracy Score: 80.90267116978815 %

#####

```
N/A% (0 of 20) |                               | Elapsed Time: 0:00:00 ETA:  --:--:--
initial error= 0.8079450739255292
100% (20 of 20) |#####| Elapsed Time: 0:00:14 Time: 0:00:14
```

```
alpha= 9.99e-05
max_iterations= 20
```



```
Train Accuracy Score: 82.52798252798253 %
Test Accuracy Score: 81.05618667485416 %
```

```
In [2]:
```