Lab3 [D:\Google Drive\UMKC\PhD\Classes\Python\Labs\Lab 3\Lab3] - ...\Lab3 Q3.py [Lab3] - PyCharm

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Lab3 > Lab3 Q3.py

Lab3 Q2 - Linear

Project

Lab3 D:\Google Drive\UMKC\PhD\Classes\Python\Labs\Lab 3\La

venv library root

desktop.ini

Lab3 Q1.py

Lab3 Q2 - Linear.py

Lab3 Q2-RBF.py

Lab3 Q3.py

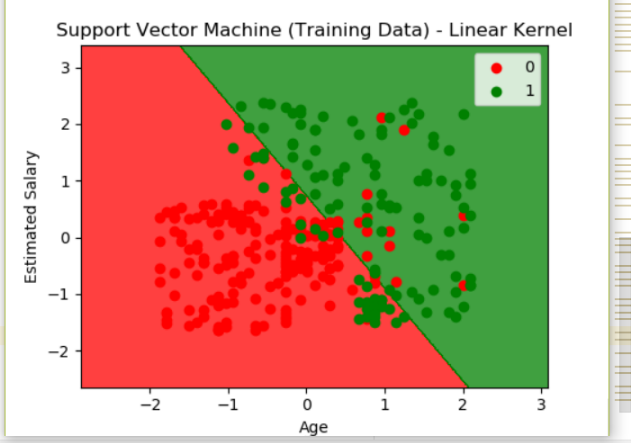
temp.py

External Libraries

Lab3 Q2 - Linear.py | Lab3 Q2-RBF.py | Lab3 Q3.py | Lab3 Q1.py | Q1NaiveBayes.py | Class 7 Revised.py

```
42  wnl = WordNetLemmatizer()  #create lemmatizer
43  lem = [wnl.lemmatize(tkn,pos="v") for tkn in token]
44  print("Lemmatize (verbs): \n",lem,"\n")
45
46  #Try lemmatizing looking for adjectives
47  wnl = WordNetLemmatizer()  #create lemmatizer
48  lem = [wnl.lemmatize(tkn,pos="a") for tkn in token]
49  print("Lemmatize (adjectives): \n",lem,"\n")
50
51  #Try lemmatizing looking for adverbs
52  wnl = WordNetLemmatizer()  #create lemmatizer
53  lem = [wnl.lemmatize(tkn,pos="r") for tkn in token]
54  print("Lemmatize (adverbs): \n",lem,"\n")
55
56  #Apply bigram on the text
57  #Grouping two words together. This includes special characters like '('
58  bigram = [tkn for tkn in nltk.bigrams(token)]
59  print("Bigram: \n",bigram)
60
61  #Calculate the Bigram Frequency
62  freq_bi=nltk.FreqDist(bigram)
63
64  #Find the 5 most common bigrams
65  bi_common=freq_bi.most_common(5)
66  print("\nThe 5 most common bigrams are:\n",bi_common)
```

Figure 1



Run: Lab3 Q2-RBF | Lab3 Q1 | Lab3 Q2 - Linear

```
"D:\Google Drive\UMKC\PhD\Classes\Python\Labs\Lab 3\Lab3\venv\Scripts\python.exe" "D:/Google Drive/UMKC/PhD/Classes/Python/Labs/Lab 3/Lab3/Lab3 Q2 - Linear.py"
D:\Google Drive\UMKC\PhD\Classes\Python\Labs\Lab 3\Lab3\venv\lib\site-packages\sklearn\utils\validation.py:475: DataConversionWarning: Data with input dtype int64 was converted to float64 by StandardScale
  warnings.warn(msg, DataConversionWarning)
The confusion matrix for the SVM analysis is:
 [[51  5]
 [10 14]]
```

62:30 CRLF UTF-8

11:24 PM
3/5/2018