```
 1  "C:\Users\Soumik Dey\Anaconda3\python.exe" "C:/Users/
    Soumik Dey/PycharmProjects/amlproject/all_data_fitting.py"
 2  C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
 3    warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
 4
 5      Baseline:
 6      Test Accuracy:  0.523415977961
 7                  precision    recall  f1-score   support
 8  C:\Users\Soumik Dey\Anaconda3\lib\site-packages\sklearn\
    metrics\classification.py:1074: UndefinedMetricWarning:
    Precision and F-score are ill-defined and being set to 0.0
    in labels with no predicted samples.
 9
10    'precision', 'predicted', average, warn_for)
11              0        0.00       0.00      0.00       173
12              1        0.52       1.00      0.69       190
13
14    avg / total        0.27       0.52      0.36       363
15
16
17      Features:  Sentiment
18        GaussianNB
19        Test Accuracy:  0.606060606061
20                  precision    recall  f1-score
    support
21
22                0        0.58       0.61      0.59
    173
23                1        0.63       0.61      0.62
    190
24
25        avg / total        0.61       0.61      0.61
    363
26
27  C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
28    warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
29  C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
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30    warnings.warn("detected Windows; aliasing chunkize to
   chunkize_serial")
31 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
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   utils.py:855: UserWarning: detected Windows; aliasing
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35 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
   chunkize to chunkize_serial
36    warnings.warn("detected Windows; aliasing chunkize to
   chunkize_serial")
37 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
   chunkize to chunkize_serial
38    warnings.warn("detected Windows; aliasing chunkize to
   chunkize_serial")
39
40
41
42
43
44     LogisticRegression
45       Best hyperparameters:  {'clf__C': 0.1}
46       Validation Accuracy:  0.603981623277
47       Test Accuracy:  0.597796143251
48                     precision    recall  f1-score
   support
49
50                  0       0.59      0.50      0.54
   173
51                  1       0.60      0.69      0.64
   190
52
53       avg / total       0.60      0.60      0.59
   363
54
55     SVC
56       Test Accuracy:  0.600550964187
57                     precision    recall  f1-score
```

```
57 support
58
59                       0      0.59      0.52      0.55
   173
60                       1      0.61      0.67      0.64
   190
61
62        avg / total      0.60      0.60      0.60
   363
63
64
65    Features:  Bigrams
66      GaussianNB
67       Test Accuracy:  0.683195592287
68                  precision    recall  f1-score
   support
69
70                       0      0.64      0.76      0.70
   173
71                       1      0.74      0.61      0.67
   190
72
73        avg / total      0.69      0.68      0.68
   363
74
75 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
   chunkize to chunkize_serial
76   warnings.warn("detected Windows; aliasing chunkize to
   chunkize_serial")
77 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
   chunkize to chunkize_serial
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   chunkize_serial")
79 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
   chunkize to chunkize_serial
80   warnings.warn("detected Windows; aliasing chunkize to
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81 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
   utils.py:855: UserWarning: detected Windows; aliasing
   chunkize to chunkize_serial
82   warnings.warn("detected Windows; aliasing chunkize to
   chunkize_serial")
```

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 83  C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
     utils.py:855: UserWarning: detected Windows; aliasing
     chunkize to chunkize_serial
 84    warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
 85  C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
     utils.py:855: UserWarning: detected Windows; aliasing
     chunkize to chunkize_serial
 86    warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
 87
 88
 89
 90
 91
 92
 93      LogisticRegression
 94      Best hyperparameters:  {'clf__C': 10.0}
 95      Validation Accuracy:  0.725267993874
 96      Test Accuracy:  0.719008264463
 97                    precision    recall  f1-score
     support
 98
 99               0       0.71       0.70       0.70
     173
100               1       0.73       0.74       0.73
     190
101
102     avg / total      0.72       0.72       0.72
     363
103
104      SVC
105      Test Accuracy:  0.710743801653
106                    precision    recall  f1-score
     support
107
108               0       0.69       0.71       0.70
     173
109               1       0.73       0.71       0.72
     190
110
111     avg / total      0.71       0.71       0.71
     363
112
113
```

```
114     Features:  LDA
115       GaussianNB
116       Test Accuracy:  0.619834710744
117                  precision    recall  f1-score
    support
118
119             0       0.84      0.25      0.38
    173
120             1       0.58      0.96      0.73
    190
121
122     avg / total       0.71      0.62      0.56
    363
123
124 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
125   warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
126 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
127   warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
128 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
129   warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
130 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
131   warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
132 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
133   warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
134 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
    utils.py:855: UserWarning: detected Windows; aliasing
    chunkize to chunkize_serial
135   warnings.warn("detected Windows; aliasing chunkize to
    chunkize_serial")
136
```

```
137
138
139
140
141
142        LogisticRegression
143          Best hyperparameters:  {'clf__C': 0.1}
144          Validation Accuracy:  0.634303215926
145          Test Accuracy:  0.64738292011
146                    precision    recall  f1-score
    support
147
148                0       0.64      0.61      0.62
    173
149                1       0.66      0.68      0.67
    190
150
151       avg / total      0.65      0.65      0.65
    363
152
153        SVC
154          Test Accuracy:  0.628099173554
155                    precision    recall  f1-score
    support
156
157                0       0.59      0.71      0.65
    173
158                1       0.68      0.55      0.61
    190
159
160       avg / total      0.64      0.63      0.63
    363
161
162
163      Features:  All_f
164        GaussianNB
165          Test Accuracy:  0.707988980716
166                    precision    recall  f1-score
    support
167
168                0       0.69      0.69      0.69
    173
169                1       0.72      0.72      0.72
    190
170
```

```
171              avg / total          0.71        0.71        0.71
     363

172

173 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
     utils.py:855: UserWarning: detected Windows; aliasing
     chunkize to chunkize_serial
174   warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
175 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
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     chunkize_serial")
177 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
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     chunkize to chunkize_serial
178   warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
179 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
     utils.py:855: UserWarning: detected Windows; aliasing
     chunkize to chunkize_serial
180   warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
181 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
     utils.py:855: UserWarning: detected Windows; aliasing
     chunkize to chunkize_serial
182   warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
183 C:\Users\Soumik Dey\Anaconda3\lib\site-packages\gensim\
     utils.py:855: UserWarning: detected Windows; aliasing
     chunkize to chunkize_serial
184   warnings.warn("detected Windows; aliasing chunkize to
     chunkize_serial")
185
186
187
188
189
190
191     LogisticRegression
192      Best hyperparameters:  {'clf__C': 10.0}
193      Validation Accuracy:  0.746707503828
194      Test Accuracy:  0.732782369146
195                      precision    recall  f1-score
     support
```

```
196
197                     0       0.76       0.64       0.69
    173
198                     1       0.71       0.82       0.76
    190
199
200     avg / total            0.74       0.73       0.73
    363
201
202      SVC
203      Test Accuracy:  0.743801652893
204                 precision     recall   f1-score
    support
205
206                     0       0.76       0.68       0.72
    173
207                     1       0.73       0.80       0.77
    190
208
209     avg / total            0.74       0.74       0.74
    363
210
211
212
213
214 Process finished with exit code 0
215
```