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Making bag of words.....
Train loading........
testing loading
Prepare Scoring matrix
Results for Naive Bayes.....

accuracy =  76.220625
0 represents negative sentiment and 1 represents positive sentiment
Confusion matrix (row represents original result and col represents predicted
results :-
    0      1
0 213502 25702
1 88439 152357

For negative sentiment:
precsion = 0.7070984066423572
recall =   0.8925519640139797
f1s =   0.7890750168623936

For positive sentiment:
precsion = 0.8556545864011367
recall =   0.6327223043572152
f1s =   0.7274928077735732
Aver. Precision =   0.7813764965217469
Aver. recall =   0.7626371341855975
Aver. f1s =   0.7582839123179834
Model 1..........
Model 2..........
Model 3..........
Testing on  0 to 1500
Testing on  1500 to 3000
Testing on  3000 to 4500
Testing on  4500 to 6000
Testing on  6000 to 7500
Testing on  7500 to 9000
Testing on  9000 to 10500
Testing on  10500 to 12000
Testing on  12000 to 13500
Testing on  13500 to 15000
Testing on  15000 to 16500
Testing on  16500 to 18000
Testing on  18000 to 19500
Testing on  19500 to 21000
Testing on  21000 to 22500
Testing on  22500 to 24000
Testing on  24000 to 25500
Testing on  25500 to 27000
Testing on  27000 to 28500
Testing on  28500 to 30000
Testing on  30000 to 31500
Testing on  31500 to 33000
Testing on  33000 to 34500
Testing on  34500 to 36000
Testing on  36000 to 37500
Testing on  37500 to 39000
Testing on  39000 to 40500
Testing on  40500 to 42000
Testing on  42000 to 43500
Testing on  43500 to 45000
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Testing on   45000 to 46500
Testing on   46500 to 48000
Testing on   48000 to 49500
Testing on   49500 to 51000
Testing on   51000 to 52500
Testing on   52500 to 54000
Testing on   54000 to 55500
Testing on   55500 to 57000
Testing on   57000 to 58500
Testing on   58500 to 60000
Testing on   60000 to 61500
Testing on   61500 to 63000
Testing on   63000 to 64500
Testing on   64500 to 66000
Testing on   66000 to 67500
Testing on   67500 to 69000
Testing on   69000 to 70500
Testing on   70500 to 72000
Testing on   72000 to 73500
Testing on   73500 to 75000
Testing on   75000 to 76500
Testing on   76500 to 78000
Testing on   78000 to 79500
Testing on   79500 to 81000
Testing on   81000 to 82500
Testing on   82500 to 84000
Testing on   84000 to 85500
Testing on   85500 to 87000
Testing on   87000 to 88500
Testing on   88500 to 90000
Testing on   90000 to 91500
Testing on   91500 to 93000
Testing on   93000 to 94500
Testing on   94500 to 96000
Testing on   96000 to 97500
Testing on   97500 to 99000
Testing on   99000 to 100500
Testing on   100500 to 102000
Testing on   102000 to 103500
Testing on   103500 to 105000
Testing on   105000 to 106500
Testing on   106500 to 108000
Testing on   108000 to 109500
Testing on   109500 to 111000
Testing on   111000 to 112500
Testing on   112500 to 114000
Testing on   114000 to 115500
Testing on   115500 to 117000
Testing on   117000 to 118500
Testing on   118500 to 120000
Testing on   120000 to 121500
Testing on   121500 to 123000
Testing on   123000 to 124500
Testing on   124500 to 126000
Testing on   126000 to 127500
Testing on   127500 to 129000
Testing on   129000 to 130500
Testing on   130500 to 132000
Testing on   132000 to 133500
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Testing on   133500 to 135000
Testing on   135000 to 136500
Testing on   136500 to 138000
Testing on   138000 to 139500
Testing on   139500 to 141000
Testing on   141000 to 142500
Testing on   142500 to 144000
Testing on   144000 to 145500
Testing on   145500 to 147000
Testing on   147000 to 148500
Testing on   148500 to 150000
Testing on   150000 to 151500
Testing on   151500 to 153000
Testing on   153000 to 154500
Testing on   154500 to 156000
Testing on   156000 to 157500
Testing on   157500 to 159000
Testing on   159000 to 160500
Testing on   160500 to 162000
Testing on   162000 to 163500
Testing on   163500 to 165000
Testing on   165000 to 166500
Testing on   166500 to 168000
Testing on   168000 to 169500
Testing on   169500 to 171000
Testing on   171000 to 172500
Testing on   172500 to 174000
Testing on   174000 to 175500
Testing on   175500 to 177000
Testing on   177000 to 178500
Testing on   178500 to 180000
Testing on   180000 to 181500
Testing on   181500 to 183000
Testing on   183000 to 184500
Testing on   184500 to 186000
Testing on   186000 to 187500
Testing on   187500 to 189000
Testing on   189000 to 190500
Testing on   190500 to 192000
Testing on   192000 to 193500
Testing on   193500 to 195000
Testing on   195000 to 196500
Testing on   196500 to 198000
Testing on   198000 to 199500
Testing on   199500 to 201000
Testing on   201000 to 202500
Testing on   202500 to 204000
Testing on   204000 to 205500
Testing on   205500 to 207000
Testing on   207000 to 208500
Testing on   208500 to 210000
Testing on   210000 to 211500
Testing on   211500 to 213000
Testing on   213000 to 214500
Testing on   214500 to 216000
Testing on   216000 to 217500
Testing on   217500 to 219000
Testing on   219000 to 220500
Testing on   220500 to 222000
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Testing on   222000 to 223500
Testing on   223500 to 225000
Testing on   225000 to 226500
Testing on   226500 to 228000
Testing on   228000 to 229500
Testing on   229500 to 231000
Testing on   231000 to 232500
Testing on   232500 to 234000
Testing on   234000 to 235500
Testing on   235500 to 237000
Testing on   237000 to 238500
Testing on   238500 to 240000
Testing on   240000 to 241500
Testing on   241500 to 243000
Testing on   243000 to 244500
Testing on   244500 to 246000
Testing on   246000 to 247500
Testing on   247500 to 249000
Testing on   249000 to 250500
Testing on   250500 to 252000
Testing on   252000 to 253500
Testing on   253500 to 255000
Testing on   255000 to 256500
Testing on   256500 to 258000
Testing on   258000 to 259500
Testing on   259500 to 261000
Testing on   261000 to 262500
Testing on   262500 to 264000
Testing on   264000 to 265500
Testing on   265500 to 267000
Testing on   267000 to 268500
Testing on   268500 to 270000
Testing on   270000 to 271500
Testing on   271500 to 273000
Testing on   273000 to 274500
Testing on   274500 to 276000
Testing on   276000 to 277500
Testing on   277500 to 279000
Testing on   279000 to 280500
Testing on   280500 to 282000
Testing on   282000 to 283500
Testing on   283500 to 285000
Testing on   285000 to 286500
Testing on   286500 to 288000
Testing on   288000 to 289500
Testing on   289500 to 291000
Testing on   291000 to 292500
Testing on   292500 to 294000
Testing on   294000 to 295500
Testing on   295500 to 297000
Testing on   297000 to 298500
Testing on   298500 to 300000
Testing on   300000 to 301500
Testing on   301500 to 303000
Testing on   303000 to 304500
Testing on   304500 to 306000
Testing on   306000 to 307500
Testing on   307500 to 309000
Testing on   309000 to 310500
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Testing on  310500 to 312000
Testing on  312000 to 313500
Testing on  313500 to 315000
Testing on  315000 to 316500
Testing on  316500 to 318000
Testing on  318000 to 319500
Testing on  319500 to 321000
Testing on  321000 to 322500
Testing on  322500 to 324000
Testing on  324000 to 325500
Testing on  325500 to 327000
Testing on  327000 to 328500
Testing on  328500 to 330000
Testing on  330000 to 331500
Testing on  331500 to 333000
Testing on  333000 to 334500
Testing on  334500 to 336000
Testing on  336000 to 337500
Testing on  337500 to 339000
Testing on  339000 to 340500
Testing on  340500 to 342000
Testing on  342000 to 343500
Testing on  343500 to 345000
Testing on  345000 to 346500
Testing on  346500 to 348000
Testing on  348000 to 349500
Testing on  349500 to 351000
Testing on  351000 to 352500
Testing on  352500 to 354000
Testing on  354000 to 355500
Testing on  355500 to 357000
Testing on  357000 to 358500
Testing on  358500 to 360000
Testing on  360000 to 361500
Testing on  361500 to 363000
Testing on  363000 to 364500
Testing on  364500 to 366000
Testing on  366000 to 367500
Testing on  367500 to 369000
Testing on  369000 to 370500
Testing on  370500 to 372000
Testing on  372000 to 373500
Testing on  373500 to 375000
Testing on  375000 to 376500
Testing on  376500 to 378000
Testing on  378000 to 379500
Testing on  379500 to 381000
Testing on  381000 to 382500
Testing on  382500 to 384000
Testing on  384000 to 385500
Testing on  385500 to 387000
Testing on  387000 to 388500
Testing on  388500 to 390000
Testing on  390000 to 391500
Testing on  391500 to 393000
Testing on  393000 to 394500
Testing on  394500 to 396000
Testing on  396000 to 397500
Testing on  397500 to 399000
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Testing on   399000 to 400500
Testing on   400500 to 402000
Testing on   402000 to 403500
Testing on   403500 to 405000
Testing on   405000 to 406500
Testing on   406500 to 408000
Testing on   408000 to 409500
Testing on   409500 to 411000
Testing on   411000 to 412500
Testing on   412500 to 414000
Testing on   414000 to 415500
Testing on   415500 to 417000
Testing on   417000 to 418500
Testing on   418500 to 420000
Testing on   420000 to 421500
Testing on   421500 to 423000
Testing on   423000 to 424500
Testing on   424500 to 426000
Testing on   426000 to 427500
Testing on   427500 to 429000
Testing on   429000 to 430500
Testing on   430500 to 432000
Testing on   432000 to 433500
Testing on   433500 to 435000
Testing on   435000 to 436500
Testing on   436500 to 438000
Testing on   438000 to 439500
Testing on   439500 to 441000
Testing on   441000 to 442500
Testing on   442500 to 444000
Testing on   444000 to 445500
Testing on   445500 to 447000
Testing on   447000 to 448500
Testing on   448500 to 450000
Testing on   450000 to 451500
Testing on   451500 to 453000
Testing on   453000 to 454500
Testing on   454500 to 456000
Testing on   456000 to 457500
Testing on   457500 to 459000
Testing on   459000 to 460500
Testing on   460500 to 462000
Testing on   462000 to 463500
Testing on   463500 to 465000
Testing on   465000 to 466500
Testing on   466500 to 468000
Testing on   468000 to 469500
Testing on   469500 to 471000
Testing on   471000 to 472500
Testing on   472500 to 474000
Testing on   474000 to 475500
Testing on   475500 to 477000
Testing on   477000 to 478500
Testing on   478500 to 480000


Stats For SVC Model
accuracy =  77.63333333333334
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0 represents negative sentiment and 1 represents positive sentiment
Confusion matrix (row represents original result and col represents predicted
results :-
     0   1
0 196397 42807
1 64553 176243

For negative sentiment:
precsion = 0.7526231078750718
recall = 0.8210439624755439
f1s = 0.7853461133970737

For positive sentiment:
precsion = 0.8045788632732253
recall = 0.731918304290769
f1s = 0.7665305341353409
Aver. Precision = 0.7786009855741485
Aver. recall = 0.7764811333831565
Aver. f1s = 0.7759383237662073

Stats For Decision Tree Model
accuracy = 76.53625
0 represents negative sentiment and 1 represents positive sentiment
Confusion matrix (row represents original result and col represents predicted
results :-
     0   1
0 179207 59997
1 52629 188167

For negative sentiment:
precsion = 0.7729903897582774
recall = 0.7491806157087674
f1s = 0.7608992866847827

For positive sentiment:
precsion = 0.758236488773553
recall = 0.781437399292347
f1s = 0.769662140052356
Aver. Precision = 0.7656134392659152
Aver. recall = 0.7653090075005572
Aver. f1s = 0.7652807133685693

Stats For MLP Model
accuracy = 78.03520833333333
0 represents negative sentiment and 1 represents positive sentiment
Confusion matrix (row represents original result and col represents predicted
results :-
     0   1
0 191319 47885
1 57546 183250

For negative sentiment:
precsion = 0.7687661985413778
recall = 0.7998152204812629
f1s = 0.7839834121814744

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For positive sentiment:
precsion = 0.792826703009064
recall =  0.7610176248774897
f1s =  0.776596578737146
Aver. Precision =  0.780796450775221
Aver. recall =  0.7804164226793763
Aver. f1s =  0.7802899954593102
```